



NAVAL POSTGRADUATE SCHOOL

MONTEREY, CALIFORNIA

THESIS

UNLOCKING INDIAN MARITIME STRATEGY

by

Daniel Rahn

December 2006

Thesis Advisor:
Second Reader:

Daniel Moran
Surinder Rana

Approved for public release; distribution is unlimited

THIS PAGE INTENTIONALLY LEFT BLANK

REPORT DOCUMENTATION PAGE			<i>Form Approved OMB No. 0704-0188</i>	
Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instruction, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188) Washington DC 20503.				
1. AGENCY USE ONLY (Leave blank)		2. REPORT DATE December 2006	3. REPORT TYPE AND DATES COVERED Master's Thesis	
4. TITLE AND SUBTITLE Unlocking Indian Maritime Strategy			5. FUNDING NUMBERS	
6. AUTHOR(S) LT Daniel Rahn				
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Naval Postgraduate School Monterey, CA 93943-5000			8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING /MONITORING AGENCY NAME(S) AND ADDRESS(ES) N/A			10. SPONSORING/MONITORING AGENCY REPORT NUMBER	
11. SUPPLEMENTARY NOTES The views expressed in this thesis are those of the author and do not reflect the official policy or position of the Department of Defense or the U.S. Government.				
12a. DISTRIBUTION / AVAILABILITY STATEMENT Approved for public release; distribution is unlimited			12b. DISTRIBUTION CODE	
13. ABSTRACT (maximum 200 words) The Indian navy has undergone several periods of expansion in its short history which have signaled significant change in the Indian Ocean region. It is currently undergoing another. This thesis examines the current expansion, and interprets it in light of the Indian navy's maritime strategy. It focuses on three elements critical to all strategy, but which are especially relevant in this case: national interests, perceived threats and naval capabilities. A change in any of the three elements usually signals and requires analogous change at the strategic level. This thesis reveals that there has been an increase in all three elements, which forecasts an immense increase in India's strategic ambitions at sea, and further naval expansion.				
14. SUBJECT TERMS: Indian Maritime Strategy, Indian Navy, India, South Asia, Naval Strategy, Indian Ocean.			15. NUMBER OF PAGES 103	
			16. PRICE CODE	
17. SECURITY CLASSIFICATION OF REPORT Unclassified	18. SECURITY CLASSIFICATION OF THIS PAGE Unclassified	19. SECURITY CLASSIFICATION OF ABSTRACT Unclassified	20. LIMITATION OF ABSTRACT UL	

NSN 7540-01-280-5500

Standard Form 298 (Rev. 2-89)
Prescribed by ANSI Std. Z39-18

THIS PAGE INTENTIONALLY LEFT BLANK

Approved for public release; distribution is unlimited

UNLOCKING INDIAN MARITIME STRATEGY

Daniel R. Rahn
Lieutenant, United States Navy

Submitted in partial fulfillment of the
requirements for the degree of

MASTER OF ARTS IN NATIONAL SECURITY AFFAIRS

from the

**NAVAL POSTGRADUATE SCHOOL
December 2006**

Author: Daniel Rahn

Approved by: Daniel Moran
Thesis Advisor

Surinder Rana
Second Reader

Douglas Porch
Chairman, Department of National Security Affairs

THIS PAGE INTENTIONALLY LEFT BLANK

ABSTRACT

The Indian navy has undergone several periods of expansion in its short history which have signaled significant change in the Indian Ocean region. It is currently undergoing another. This thesis examines the current expansion, and interprets it in light of the Indian navy's maritime strategy. It focuses on three elements critical to all strategy, but which are especially relevant in this case: national interests, perceived threats and naval capabilities. A change in any of the three elements usually signals and requires analogous change at the strategic level. This thesis reveals that there has been an increase in all three elements, which forecasts an immense increase in India's strategic ambitions at sea, and further naval expansion.

THIS PAGE INTENTIONALLY LEFT BLANK

TABLE OF CONTENTS

I.	INTRODUCTION.....	1
A.	PURPOSE.....	1
B.	IMPORTANCE.....	1
C.	LITERATURE REVIEW	3
D.	ORGANIZATION	5
E.	SOURCES.....	6
II.	THE EVOLUTION OF INDIAN MARITIME STRATEGY.....	9
A.	INTRODUCTION.....	9
B.	THE ERA OF ECONOMIC RECONSTRUCTION (1947-1962).....	9
1.	Threats	10
2.	Interests.....	11
3.	Capabilities	12
4.	Maritime Strategy	13
C.	THE ERA OF MILITARY BUILDUP (1963-75)	13
1.	Threats	14
2.	Interests.....	15
3.	Capabilities	15
4.	Maritime Strategy	16
D.	THE ERA OF ECONOMIC LIBERALIZATION (1976-90).....	16
1.	Threats	17
2.	Interests.....	18
3.	Capabilities	18
4.	Maritime Strategy	19
E.	THE ERA OF POLITICAL ASCENDANCY (1990-2001).....	20
1.	Threats	20
2.	Interests.....	22
3.	Capabilities	22
4.	Maritime Strategy	23
F.	CONCLUSION	23
III.	LOCATING INDIA’S STRATEGIC POSITION	25
IV.	UNLOCKING INDIAN NATIONAL INTERESTS.....	27
A.	INTRODUCTION.....	27
B.	CATEGORIES OF NATIONAL INTERESTS	27
C.	INDIA’S SECURITY INTERESTS	29
D.	INDIA’S ECONOMIC INTERESTS.....	32
E.	INDIA’S POLITICAL INTERESTS	35
F.	CONCLUSIONS	39
V.	THREATS TO INDIA AND ITS NAVY	41
A.	INTRODUCTION.....	41
B.	TRADITIONAL THREATS.....	42

1.	Pakistan.....	42
a.	<i>Defining the Threat</i>	43
b.	<i>Threat to India and Its Navy</i>	44
2.	Neighboring Small States	46
a.	<i>Defining the Threat</i>	47
b.	<i>Threat to India and Its Navy</i>	49
3.	Persian Gulf States.....	50
a.	<i>Defining the Threat</i>	50
b.	<i>Threat to India and Its Navy</i>	51
4.	Southeast Asian States.....	53
a.	<i>Defining the Threat</i>	54
b.	<i>Threat to India and Its Navy</i>	55
5.	China	58
a.	<i>Defining the Threat</i>	59
b.	<i>Threat to India and Its Navy</i>	60
6.	United States.....	62
a.	<i>Defining the Threat</i>	63
b.	<i>Threat to India and Its Navy</i>	63
C.	NON-TRADITIONAL THREATS.....	65
1.	Terrorism.....	65
2.	Piracy	67
3.	Smuggling	68
4.	Natural Disasters.....	69
D.	CONCLUSION	70
VI.	UNLOCKING INDIAN MARITIME CAPABILITIES	71
A.	INTRODUCTION.....	71
B.	NAVAL CAPABILITIES.....	71
1.	Organization.....	71
2.	Surface Fleet.....	72
3.	Submarine Arm.....	74
4.	Naval Air Arm.....	75
C.	ECONOMIC CAPABILITIES.....	76
D.	INDIGENOUS PRODUCTION CAPABILITIES.....	76
E.	TECHNOLOGIC CAPABILITIES	78
F.	CONCLUSIONS	79
VII.	UNLOCKING INDIAN MARITIME STRATEGY	81
	LIST OF REFERENCES	83
	INITIAL DISTRIBUTION LIST	89

LIST OF FIGURES

Figure 1.	Indian Navy's Area of Interest.....	30
Figure 2.	Malacca Strait Security Areas. (From: http://www.jinsa.org/documents/200507/3055.jpg)	55
Figure 3.	Major Maritime Smuggling Routes in South Asia (From: http://en.wikipedia.org/wiki/Image:HeroinWorld.png)	68

THIS PAGE INTENTIONALLY LEFT BLANK

ACKNOWLEDGMENTS

First and foremost, I would like to thank my loving wife and family for their continued support through the challenges of this very laborious process. I would also like to thank my advisors, Professor Daniel Moran and Surinder Rana, whose valuable inputs significantly improved the overall production of this thesis. The South Asian regional specialists, Prof. Peter Lavoy and Brig. Feroz Khan were especially helpful in crystallizing my thoughts on the region.

I would also like to thank a few students who braved many an hour listening to my random thoughts and providing valuable feedback as well. The two Paul's, Major Paul Nosek, Capt Paul Bell and I were thrust into the South Asia problem together and we seem to have escaped with few resultant mental disabilities. Lieutenant J.W. Stolze also helped provide feedback from our community's perspective. To those mentioned and those I have forgotten thank you and good luck in your future endeavors.

THIS PAGE INTENTIONALLY LEFT BLANK

I. INTRODUCTION

A. PURPOSE

On October 16th, 2006, the Indian navy declared it had established its first ever maritime strategy. Though this is the initial installment of a maritime strategy, Indian strategy has been expanding since India's partition from the British Empire. India appears poised to assume greater control of the Indian Ocean region (IOR) and South Asia through an expansion of its maritime strategy. This strategy remains classified and therefore presents a problem to those who require an interpretation of Indian intentions. Though this document is classified, its contents are undoubtedly the product of a near universal strategic calculus which reflects, however imperfectly, India's national interests, perceived threats and military capabilities. According to its Naval Chief, Admiral Arun Prakash, the Indian navy is no longer "China or Pakistan centric" and now must "take into account the matrix of economic interests, military threats and other national interests" which has caused an expansion in the Indian navy.¹ This is just one of the many changes to India's strategic calculus. In order to more fully explain the expansion of India's maritime strategy and present a current view of that strategy, I will examine its national interests, perceived threats and capabilities.

B. IMPORTANCE

The Indian Ocean is an important resource as the third largest body of water on earth, providing the major sea routes connecting the Middle East, Africa, and East Asia with Europe and the western hemisphere. The security of this region has great economic and political implications. Through its waters pass an abundance of petroleum and petroleum products from the oilfields of the Persian Gulf and Indonesia. An estimated 40 percent of the world's offshore oil production comes from the Indian Ocean.² South Asia ranks among the world's most densely-populated regions, containing almost 1.6 billion people - about a quarter of all the people in the world. The stability and security in South Asia has been in flux over the last half century as the region went through a wave of

¹ "Indian navy to be Balanced in Ten Years", <http://www.india-defence.com/reports/2299> (Accessed November 2006).

² CIA *World Factbook*, <https://www.cia.gov/cia/publications/factbook/geos/xo.html> (Accessed August 2006).

democratization that is yet to be completed. Wars in this region have been fought over territory, resources and religion. The combination of all these factors provides a view of relative instability and insecurity.

Is India, in partnership with the United States, ready to play a significant role in meeting the challenges of the emerging maritime threats resident in the IOR? In July 2005, President Bush announced his intention to increase cooperation with India in two very important areas – civilian nuclear technology and military cooperation. This announcement signaled the acknowledgement by the United States, that it recognized India as a regional power.³ In August 2005, the Chief of Naval Operations for the United States Navy appeared ready to take advantage in the increased military cooperation between India and the United States when he called for the creation of a “1000-ship navy” to better provide security of the global maritime environment by improving cooperation among the navies of “all freedom-loving nations, standing watch over the seas, standing watch over each other.”⁴ India’s own maritime capabilities would have a great impact on its ability to join this effort and those capabilities are dependent upon India’s maritime strategy.

Managing the security and stability of the IOR is a key requirement for India and in the formulation of its maritime strategy. Strategic thought has not been considered a great strength of this emerging economic and military power.⁵ It is also deficient of a system to enable access to official documents and thereby promote serious scholarship on government policy.⁶ This combination of practices has forced Indian leadership to be largely reactive to its regional and international security environment and thereby provided an air of strategic ambiguity to the global community. Historically, unexplained growth and strategic ambiguity often lead to conflict, especially in a region as sensitive as

³ “U.S. Acknowledges India as Regional Force”, www.jinsa.org/articles/view.html?documentid=3093 (Accessed November 2006).

⁴ “New U.S. Navy Chief Wants ‘1000-ship’ International Navy”, <http://www.defensenews.com/story.php?F=1076711&C=navwar> (Accessed November 2006).

⁵ George K. Tanham, *Securing India*, Manohar Publishers, 1996.

⁶ PM of India, Monmohan Singh, April 18, 2006 Speech on the release of Jagat Mehta’s book. He hoped to encourage a 30 or 50 year rule to declassify information to improve Indian strategic thought and promote long-term thinking about strategic matters.

South and Southeast Asia where a convergence of strategic spheres of influence by the United States, India, and China reside. India's continued naval expansion will inevitably affect U.S., Chinese and Pakistani decision making in the future and therefore must be considered at this time. Gaining a better understanding of the critical components of Indian maritime strategy is a step toward reducing strategic uncertainty and thereby contributes toward greater security and stability. In addition, with this information at hand, political and military decision-makers will be much more informed as to the intentions of Indian leadership as it attempts to increase the cooperation between these two countries and their respective armed forces.

C. LITERATURE REVIEW

The historical literature on the Indian maritime strategy is limited, chiefly owing to lack of access to relevant documents. The most thorough studies of Indian maritime strategy include works by Panikkar, Harrison and Subrahmanyam, and Roy-Chaudhury. While these works provide very detailed examinations of India's maritime security interests and the overall strategic picture at that time, none of these authors have analyzed the structural components of India's maritime strategy in that context and therefore cannot provide a detailed account of the basis for the development of Indian maritime strategy. In addition very little detailed work has been completed since the middle of the 1990's, which does not consider the changes to the Indian strategic calculus.

The first work examined is by K. M. Panikkar, a renowned historian with significant diplomatic experience in the post-independence period examines India's strategic picture in that period with a view toward the need for developing greater defense capabilities than economic development and growth. Panikkar's notable work on the subject is contained in his 1945 book⁷ on the influence of sea power, and his 1960 book,⁸ which dedicates a chapter to naval strategy. He provides a sound and rationale argument for expanding India's naval forces, especially given the strategic picture of that time. While his work was the foundational piece which indicated India's quest to develop its naval force during the post-independence period, India's recent ascendancy in economic and political terms has made his work largely irrelevant in today's world.

⁷ K. M. Panikkar, *India and the Indian Ocean*, George Allen and Unwin Ltd, 1945.

⁸ K. M. Panikkar, *Problems of Indian Defense*, Asia Publishing House, 1960.

K. Subrahmanyam, one of India's top strategic thinkers and former Director of Institute of Defence Studies and Analyses in New Delhi, has contributed many written works on the subject of Indian security over the years. His most notable work is his 1989 co-authored book on the security of the Indian Ocean in the Cold War years.⁹ He also provides a detailed examination of the Indian response to the strategic picture, much of which is based upon the elements of sea power promoted by Mahan and not really relevant to the naval strategy in the context this thesis seeks to explore.

The most thorough and revealing work is by Rahul Roy-Chaudhury, a policy analyst with extensive experience in intelligence assessment, threat analysis and national security planning for the government of India. His published works are primarily centered on issues of Indian defense. Roy-Chaudhury's 1995 book on the value of sea power for India. He provides a very detailed overview of the growth and expansion of the Indian navy up to the late 1980's, in response to India's perceived threats.¹⁰ He also examines the cause/effect relationship between India and its adversaries which will undoubtedly continue to have utility in the current period. Unfortunately, a threat-based analysis only explains a portion of India's maritime history. This thesis contends that its current strategy accounts for not just the threat element, but also the element of interests and capabilities.

The most recent literature on India's maritime strategy leaves gaps in understanding. India's national interests or capabilities, thereby promoting the continued belief in a threat-based strategy. The current literature on Indian maritime strategy includes works by Berlin, Prakash and Roy.

The first work examined is by Donald Berlin, a strategic analyst with experience in intelligence assessment, threat analysis and national security planning for the United States. The focus of his work is primarily centered on issues in the IOR. His notable work on Indian maritime strategy is contained in an article in the Naval War College

⁹ Selig Harrison and K. Subrahmanyam, *Superpower Rivalry in the Indian Ocean*, Oxford University Press, 1989.

¹⁰ Rahul Roy-Chaudhury, *Sea Power and Indian Security*, Brassey's, 1995.

Review.¹¹ While he does not spell out the Indian maritime strategy he does provide an overview of Indian interests in the Indian Ocean by examining its relations with key powers and some of the elements of Indian maritime capability to support its strategy. His examination is an outside-in perspective, which relates what responses should be taken by others as a result of Indian developments; whereas I am looking to underscore the Indian response to its internal and external realities and developments.

The second work examined is by Admiral Arun Prakash, the Indian Navy's current Chief of Naval Staff. His notable work on the Indian maritime strategy is contained in an article entitled, "Future Strategy and Challenges for the Indian Navy."¹² In this article he briefly mentions India's objectives and naval capabilities, but does not really provide any depth to the argument. This article spurred my interest in the subject and underscores the importance of providing more depth and clarity in order to better understand the Indian rationale for its decisions.

The final work examined is by Vice Admiral Mihir Roy, the editor of the *Journal of Indian Ocean Studies*. Roy wrote a paper originally entitled the "Changing Face of India's Maritime Strategy."¹³ In this paper he examines the role of the navy in India's maritime strategy but fails to really address the issue of Indian maritime strategy.

Each of the previous works provided a different route to understanding India's maritime strategy. I believe in order to fully understand, a better understanding of the current India's interests, threats and capabilities is necessary. As such, it is with this concept in mind that I will try to more fully explain India's maritime strategy.

D. ORGANIZATION

I will begin with a historical survey of India's maritime strategy and its development over time. This chapter primarily serves as background information, but is essential to fully understand the evolution of Indian maritime strategy. The span of

¹¹ Donald L. Berlin, "India in the Indian Ocean" in *Naval War College Review*, vol. 59, no.2, Spring 2006, 58-89.

¹² Arun Prakash, "Future Strategy and Challenges for the Indian Navy" in the *Royal United Services Institute for Defence and Security Studies Defence Systems*, Vol. 8, No.2, November 2005, 31-33.

¹³ This article was originally entitled "The Changing Face of Maritime Strategy, but has since been changed to "Maritime Security in South West Asia". Mihir Roy, "Maritime Security in South West Asia" obtained from the Institute for International Policy Studies website at <http://www.iips.org/Roy-paper.pdf> (Accessed July 2006).

Indian history is divided into four eras in order to better explain the critical factors which most contributed toward the expansion of Indian maritime strategy in each of the eras.

The next section examines India's strategic position in order to better understand how India is placed in the international system which will inevitably affect India's maritime strategy and its expansion.

The next section examines India's national interests in order to determine if its national interests – independent of the perennial requirements of self defense - are changing in the current era. In this sense, "interest" may be considered synonymous with "aspiration" or "ambition." If India's strategic outlook is best explained by an expansion of such interests, it will contribute to a strategy that emphasizes those interests despite a changing threat environment.

The next section examines India's perceived threats. This is revealed through an examination of the traditional and non-traditional threats to Indian interests. If Indian strategy is best explained by an increased perception of threat, it will promote a strategic response to those threats and thereby emphasize a specific set of force capabilities.

The next section examines India's maritime capabilities in order to determine if its overall maritime capabilities are expanding in the current era. This will be achieved by first examining the factors that contribute towards its maritime capabilities and then determining if those capabilities are increasing. If India's strategic expansion is best explained by an expansion of its capabilities, it will contribute to a strategy that will emphasize its strengths.

I will conclude with a review of the historical and current structural components from previous chapters in order to unlock India's maritime strategy and reveal which of the examined elements most contribute to its current strategic expansion.

E. SOURCES

Primary sources that reveal a country's current strategic calculus are normally unattainable, but some countries have implemented systems to selectively declassify official documents in order to provide justification for its policy decisions. India has never implemented a system of declassification of its official documents, but since making a more complete democratic transition, it has been more transparent in the release

of annual reports, which do reveal some of its strategic preferences. By incorporating these newly released documents, I hope to better explain the Indian strategic calculus. It is important to emphasize that even with these documents, a complete understanding of India's strategic calculus is still imperfect. For secondary sources which reveal the Indian strategic calculus I investigated the works of scholars and journalists which scrutinize government policies, and are available in numerous publicly available journals and websites.

For primary sources which reveal India's perceived threats and national interests, I investigated official policy documents and speeches available via India's official government websites. For secondary sources which reveal India's perceived threats and national interests, I investigated literature by leading academic scholars and journalists in publicly available books, articles and websites.

For primary sources which reveal India's capabilities, I investigated numerous Indian government websites which detail its economic investment, technologic capability and industrial capability. For secondary sources which reveal Indian maritime capabilities, I investigated numerous security organizations assessments of Indian maritime capabilities via journals and the World Wide Web.

THIS PAGE INTENTIONALLY LEFT BLANK

II. THE EVOLUTION OF INDIAN MARITIME STRATEGY

A. INTRODUCTION

The Indian Navy has been built and developed over the previous half century with a vision of protecting India's economic, political and security interests. It has become a naval force more capable than any other in the South Asia region. The decision to build a large naval force is ever an easy one, for the financial investment necessary to develop and maintain it is often times immense in comparison to the political and military payoff. To the Indians it was deemed necessary, as sea power was critical to the prosperity and security of India because of the two dominant geographical features of India; the lofty mountain ranges of the Himalayas; and India's extensive coastline. In combination, they require that Indians be deeply concerned with the sea. "Since the mountains are nearly impassable, almost everything must enter India by sea."¹⁴

It is with this concept in mind that we view Indian maritime strategy. The Indian maritime strategy is designed to respond to a range of external threats and safeguard India's economic, political and security interests in the maritime domain, with a purposefully-designed set of maritime capabilities. The circumstances India is faced with today are different from those it has faced in the past, but the historical evolution of that maritime strategy is important, because it reveals the various approaches to maritime strategy that India has adopted over the course of its history. Thus, the purpose of this chapter is to highlight how India's external threats, its national interests and the development of its naval capabilities impacted its maritime strategy over the course of its history. It will reveal the priority India has assigned to its maritime security and types of strategies that India has pursued in response to the maritime security threats. The span of Indian history has been divided into four eras in order to more easily define the changes.

B. THE ERA OF ECONOMIC RECONSTRUCTION (1947-1962)

In the aftermath of India's independence, Jawaharlal Nehru envisioned India as a great power and set about to rebuild India in that mold. Nehru dismissed many of the

¹⁴ Rahul Roy-Chaudhury, *Sea Power and Indian Security*, Brassey's, 1995, 13.

external threats to India in favor of economic reconstruction,¹⁵ though by the 1962 Sino-Indian War his neglect of the armed forces would almost bring India to its knees. Indian maritime strategy was developed over this period to serve both Indian and British interests, but the emergence of India's external threats, and British refusal to get involved, served to highlight India's need to address its security problems on its own.

1. Threats

The overall threat to Indian maritime security during this era was considered insignificant. The British navy had protected colonial India's maritime interests in the past and Nehru remained confident that a free India was secure against attack because of its geo-strategic position, size, and the balance of power.¹⁶ Therefore, defense planning was primarily for internal defense against the "untamed tribes on the frontier" and internal rebellion.¹⁷ India would utilize the power of the British Army and the Royal Navy to maintain its security in the post-Independence period. It was not until China shattered this belief that India truly experienced its independence and the vulnerability that comes with it.

The maritime threat from Pakistan did not represent a threat to the survival of the Indian government. The Pakistani threat was viewed as limited to Kashmir and did not present a real threat to the Indian center. Pakistan, in the early years of its existence, was incapable of conducting a major attack, though India did realize that the threat from Pakistan would continue to evolve. Given that Pakistan's only line of communication was around India and over the seas, India believed this condition would compel Pakistan to build a formidable navy.¹⁸ A Pakistani buildup would in turn require India to expand its capabilities to respond to that threat, but Nehru believed India's security was intact in the near term and would enable him to concentrate on its economic buildup.

The threat from China was considered more worthy and acceptable due to its size, population and history as a great civilization but the actual maritime threat was still

¹⁵ Jagat S. Bright, *Important Speeches of Jawaharlal Nehru*, Indian Printing Works, 1951, 138 and 153.

¹⁶ Lorne Kavic, *India's Quest for Security: Defense Policies, 1947-1965*, University of California Press, 1967. 23.

¹⁷ K. M. Panikkar, *Problems of Indian Defense*, Asia Publishing House, 1960, 45.

¹⁸ K.M. Panikkar, *India and the Indian Ocean*, George Allen and Unwin Ltd, 1945, 83.

remote.¹⁹ Indian strategists were aware of China's maritime tradition and its recent expansion into the Indonesian archipelago, and they also believed that in time China could develop a great maritime force which could threaten India's maritime interests; but neither presented India with a need to respond immediately.²⁰ This reinforced the belief that India had time to build up its military capabilities with a meager allocation towards its maritime security forces.

The threat from the Soviet Union between 1947 and 1962 was effectively dismissed by Nehru who believed the threat from the Soviet Union was 'largely imaginary'.²¹ India contained neither the capital nor the machinery that the Soviet Union required to rebuild itself. Thus, India maintained an open relationship with the Soviet Union that would prove beneficial in the years to come.

The threat from the other two Asian maritime powers, the United States and Japan, between 1947 and 1962 was also viewed as remote. The United States was too far away and was closely aligned with Britain, which provided a certain guarantee of its security. Japan was devastated in the World War and the United States was ensuring that Japan was unable to threaten its Asian neighbors for the immediate future.

2. Interests

In the wake of independence, India was an abysmally poor and defenseless nation whose primary goal was to pursue rapid economic development and thereby provide its indigent masses a life on a scale above the traditional one of bare subsistence.²² Nehru believed that India required a vast economic and industrial expansion in order to provide for its people and therefore sought to follow in the footsteps of the Soviet Union which provided one of the dominant models for economic expansion. The Soviet Union had undergone significant economic development in the period before and during the war, and this was believed by many to demonstrate that the USSR had devised the most efficient means for a large nation to provide to its masses.

¹⁹ George K. Tanham, *Securing India*, Manohar Publishers, 1996, 59.

²⁰ K.M. Panikkar, *India and the Indian Ocean*, George Allen and Unwin Ltd, 1945, 86.

²¹ Lorne Kavic, *India's Quest for Security: Defense Policies, 1947-1965*, University of California Press, 1967, 23.

²² Lorne Kavic, *India's Quest for Security: Defense Policies, 1947-1965*, University of California Press, 1967, 39.

India did maintain a firm belief in the security of the Indian Ocean and saw that as a critical requirement for its future security. India had been shown time and again throughout history that when it neglected its maritime security, the subcontinent was put at great risk. The Chinese invaded in the 15th century and the British in the 17th Century. Each represented a period of significant decline in maritime security and eventually led to Indian colonization by the British. Thus the need to address its maritime security interests was recognized. Given the overwhelming importance assigned to problems of internal security, maritime strategy was assigned as a lower priority in the near term yet it remained a long term goal of the nation to build up its naval forces to properly safeguard it from external threats.

An additional interest of India for its navy during this period was the process of ‘Indianization’ of its navy. After partition it did not represent a totally Indian force, as almost all of its top leadership and most of its strategic planning was conducted by the British.²³ These plans would lay the foundation for the structure and mission of the Indian navy in the early years of independent rule, but they were hardly conceived for India’s benefit. Rather they echoed the British Admiralty’s desire for the Indian navy to contribute to the defense of the Commonwealth. The movement of Indian personnel into the senior ranks would enable India to pursue its own interests and assume greater responsibility of strategic planning.²⁴ The Indian navy did not complete this transition until 1958 when an Indian finally assumed the role of Indian navy service chief.²⁵

3. Capabilities

By the time of British withdrawal in 1947, India had the nucleus of a navy. Since the 1920’s it had been a subsidiary arm of the Royal navy and after the partition of the subcontinent and the Royal Indian Naval force, India possessed four sloops, two frigates, one corvette, twelve minesweepers, four tankers and a few auxiliary vessels.²⁶ The new state did not possess a single Indian officer above the rank of Commander.²⁷ At first

²³ Lorne Kavic, *India’s Quest for Security: Defense Policies, 1947-1965*, University of California Press, 1967, 117.

²⁴ Jaswant Singh, *Defending India*, St. Martin’s Press, 1999, 93.

²⁵ Verghese Koithara, *Society, State and Security: The Indian Experience*, Sage Publications, 1999, 78.

²⁶ Rahul Roy-Chaudhury, *Sea Power and Indian Security*, Brassey’s, 1995, 25.

²⁷ Verghese Koithara, *Society, State and Security: The Indian Experience*, Sage Publications, 1999, 78.

look, it appeared a very meager force, but that was in relation to the great naval powers. When considering this force in relation to India's regional neighbors, it does represent a significant force. Despite its shortcomings, India's leadership believed the navy was capable of providing for its minimal requirements for the time being. But India did promote a more balanced force of all types of units- cruisers, destroyers, frigates, minesweeper, aircraft carriers, submarines and torpedo boats, rather than just the missing bits of a larger naval scheme.²⁸ It was this interest that drove a wedge between Britain and the Indian leadership. They could not come to a compromise and this forced India to seek greater aid from the Soviet Union which was more than happy to help the Indians.

4. Maritime Strategy

Due to financial constraints and the continued presence of the British in the Indian Ocean between 1947 and 1962, Nehru chose to pursue a fiscal-based maritime strategy.²⁹ India was an extremely poor country that clearly did not have the economic or military capabilities to secure its maritime interests on its own. Nehru sought to utilize India's political alliances to better secure its interests. The British Army and the Royal Navy remained in the region and Nehru believed this to be a virtual guarantee of Indian security. This would enable Nehru to concentrate on developing India's economy and industrial capabilities which could afford greater military capabilities in the future. Given that India was able to defend its maritime interests during this era its strategy can be viewed as a successful one, but the continued pursuit of this strategy was considered fraught with danger and India therefore sought change.

C. THE ERA OF MILITARY BUILDUP (1963-75)

In the aftermath of its war with China (1962), India was more cognizant of its security vulnerabilities and security was given greater priority during this period. This was very fortuitous as India's security was tested twice during the period in 1965 and 1971. During this period Indian maritime strategy separated itself from British interests and became much more attuned to India's own security requirements and strategic planning process. These developments were further impacted in 1968 when the British withdrew east of the Suez.

²⁸ K.M. Panikkar, *Problems of Indian Defence*, Asia Publishing House, 1960, 60.

²⁹ Henry Bartlett et al., "The Art of Strategy and Force Planning" in *Strategy and Force Planning*, 3rd Edition, edited by the Strategy and Force Planning Faculty, Naval War College, 31.

1. Threats

The ability of the Indian leadership to accurately and decisively assess the maritime threat to India was less complicated during this era. Its leadership was not as hindered by the clash of interests with the British. The replacement of British with Indian officers was complete by 1962. Freedom of decision also brought the realization that the overall threat to Indian maritime interests was more significant than had been previously believed.

The threat from Pakistan arose mainly because it was being propped up by American and Chinese support. With their aid Pakistan pursued a naval buildup in the early 1960's. Pakistan made it clear that it would use this advantage in its affairs with India. Pakistan claimed the Rann of Kutch for its own in January 1965 and backed its claim with a naval offensive in April.³⁰ Its submarine force bottled up the West Indian fleet in its homeport of Bombay in the 1965 war.³¹ The Indian leadership decided to not confront the Pakistani navy in this conflict in an effort to both prevent the expansion of the Kashmir war and the destruction of its navy which was derelict and in disrepair at the time. While the Indian leadership had properly assessed that the Pakistani navy did not possess the capability to inflict harm upon the Indian center, it failed to account for public perception. This failure by the navy to protect its shores would lead the populace to demand a more competent naval force. By 1971 India had rectified its problems and the opportunity to restore the confidence of the nation presented itself. This war versus Pakistan revealed that India was the clear maritime power among the South Asian countries.³²

The Indian leadership also properly assessed the threat from external powers upon the IOR as being more significant during this period. With the British looking to remove themselves from the IOR in 1968, India hoped to assume leadership in their wake. But the external powers had alternative plans with the Soviet Union and United States making efforts to fill the void. In 1968 the Soviet Union conducted their first naval deployment

³⁰ G.M. Hiranandani, *Transition to Triumph*, Lancer, 2000, 21.

³¹ Fazal Muqem Khan, *The Story of the Pakistan Navy 1947-1972: Pakistan's Crisis in Leadership*, National Book Foundation, 1973, 216.

³² Rahul Roy-Chaudhury, *Sea Power and Indian Security*, Brassey's, 1995, 77.

to the Indian Ocean. In 1971 the United States began establishing a forward base at Diego Garcia and intervened in the 1971 war with the USS ENTERPRISE task force. This not only limited Indian freedom of action but also threatened Indian naval dominance in the region. In order to preserve its freedom of action it pursued a plan to establish the Indian Ocean as a Zone of Peace and signed a defense treaty with the Soviet Union in 1971. The signing of the defense treaty with the Soviet Union placed India in the Soviet corner and thereby limited its options for future defense acquisitions from the West.

2. Interests

Given the high threat environment that India faced during the period, Indian leadership chose to give greater priority to military buildup to rectify its increasingly hostile security problems. It was during this period that the Indian navy received its greatest allocation from the Defense Budget.³³ Indian leadership, intent on obtaining a submarine fleet, sent a delegation to the United States, Britain and the Soviet Union in 1964.³⁴ The United States and Britain were unwilling to fulfill India's requirements but the Soviet Union proved willing and able to fulfill India's requests. India's continued attempts to balance its relations with both superpowers would serve to complicate its ability to satisfy its defense needs. The 1967 Arab-Israeli war highlighted the capabilities of a potent missile boat force and thus it set out to create one.³⁵ The 1965 war with Pakistan underscored the need for improved anti-submarine warfare capabilities and increased readiness among its naval force. With a more united vision of naval force structure, Indian leadership set out to create the most formidable naval force in South Asia.

3. Capabilities

The Indian navy began this period as a formidable force on paper, but in reality many of its ships were in great disrepair. In 1962 its naval force included one light carrier, but only half its complement of aircraft; two cruisers, which were both undergoing extensive repairs; six destroyers, of which only one was operational; two old

³³ Ibid., 172.

³⁴ Ibid., 50.

³⁵ Syd Goodman and Mrityunjoy Mazumdar, "Where East Meets West, Part 2" at <http://www.bharat-rakshak.com/NAVY/History/1970s/East.html> (Accessed October 2006).

frigates and eight newer frigates, of which three had severe operational limitations; six minesweepers; three seaward defense craft; one small tanker; and one maintenance and repair ship.³⁶ By 1975 the Indian navy consisted of a missile boat force, a submarine force, an aircraft carrier task force and a naval air wing which included an anti-submarine component. It had the makings of a modern naval fleet in all dimensions especially in contrast with the other maritime forces of South Asia.

4. Maritime Strategy

With a clear expansion of threats, interests and capabilities during the period, India's maritime strategy also changed. For the first time India considered the Indian Ocean as its own, which embodied an expansion of maritime interests. India also found itself in a higher threat environment from both China and Pakistan. Due to the previous neglect to capabilities, India decided it needed to prepare for conflict and pursued a threat-based strategy.³⁷ The end result was that India quickly turned its navy's embarrassing performance in the 1965 war into a success. India now claimed dominance in the Indian Ocean. The removal of the British east of the Suez in 1968 and the Indian navy's dominant performance in the 1971 war contributed to this belief. By the early 1970's, India was committed to retaining its maritime dominance of the IOR. While Indian leaders could agree that an expansive strategy was required the actual nature of India's maritime strategy remained contentious though. Some advocated a "sea denial" strategy which concentrated on denying access to the superpowers. Others favored the development of a blue-water strategy that stressed sea control. In the end, India decided that a blue-water strategy was less alarming to both the United States and China and would also enable them to continue the expansion of their maritime interests and capabilities without forcing either power to directly contain India.

D. THE ERA OF ECONOMIC LIBERALIZATION (1976-90)

While India had emphasized solutions to its external security problems in the previous period, it had neglected its internal security problems. Due to the uneven growth and prosperity of the country, many of its different ethnic and religious groups became unruly. Emergency rule was declared in June 1975 in response to the social

³⁶ Satyindra Singh, *Blueprint to Bluewater*, Lancer, 1992, 58.

³⁷ Henry Bartlett et al., "The Art of Strategy and Force Planning" in *Strategy and Force Planning*, 3rd Edition, edited by the Strategy and Force Planning Faculty, Naval War College, 27-28.

unrest. In the aftermath of this event, India set about to redistribute wealth and promote multilateral development which of course meant less for its defense needs.³⁸ India's defense efforts were also complicated by the 1973 oil crisis, the 1986 monsoon failure and the beginning of the Soviet Union's economic restructuring which had significant effects on its defense industries and required India to pay more exorbitant prices to satisfy its defense needs.³⁹

1. Threats

The overall threat to Indian maritime security in this period was increased as result of the expansion of the area of its strategic interests. The primary threat to Indian interests was now extended to the security and stability of the Indian Ocean region. India was therefore forced to intervene in Sri Lanka and the Maldives in the late 1980's. In addition, the traditional threat remained from Pakistan which utilized the Chinese and United States willingness to contain India's power in an attempt to regain conventional parity with the Indian navy. But while Pakistan's navy increased its capabilities, it did not have the overall ability to keep pace with India's naval expansion and was largely left behind. It remained a thorn in India's side, but one that it was willing to persist due to the likelihood of superpower intervention.

The threat from external powers was much reduced in relation to the previous period but still present as the United States and Soviet Union continued their attempts to vie for control of the region in the larger context of the Cold War.⁴⁰ As neither made any significant attempts to remove India from the dominant position, the status quo was largely maintained. The Iran-Iraq and the US-Iraq Gulf Wars added an additional concern for the Indians as the United States sought to secure its access to the oil-producing Middle East. In the end, India and the United States saw their interests were mutual: maintaining access to Middle Eastern oil and ensuring its safe passage over the strategic sea lanes. India also became more aware of the rising China in this period. Its rapidly expanding economic and military power as well as its sphere of influence slowly

³⁸ Surjit Mansingh, *India's Search for Power: Indira Gandhi's Foreign Policy 1966-1982*, Sage Publishers, 1984, 94.

³⁹ G.M. Hiranandani, *Transition to Eminence*, Lancer, 2005, ix.

⁴⁰ Selig Harrison and K. Subrahmanyam, *Superpower Rivalry in the Indian Ocean*, Oxford University Press, 1989, 84.

moved towards South Asia and began to encroach upon the IOR. This directly threatened India's rise and required a long-term plan to ensure India's objectives could be achieved.

2. Interests

In the aftermath of British withdrawal east of the Suez, India underwent an expansion of interests and responsibilities when it assumed responsibility for the security and stability of the Indian Ocean region. In addition, the 1974 discovery of petroleum fields off the west coast and the United Nation's codification of the Law of the Sea in 1982, further expanded India's immediate maritime security concerns. In total, this created an expansion of Indian interests that would require further expansion of Indian naval capabilities.

3. Capabilities

While India moved away from defense as its first priority and resumed emphasizing the buildup of its economy, it did not abandon the expansion of its capabilities. During this period the Defense budget normalized to around 3-4 percent of GDP, of which, the Indian navy received between 8-13 percent of those funds.⁴¹ Despite their funding problems during this period, they acquired a multitude of capabilities: increasing the number of surface fleet vessels, further expanding its carrier force and submarine arm, and even acquiring a long range maritime air capability. It accomplished this through an extensive array of acquisitions: from the British it acquired another aircraft carrier and its complement of aircraft as well as antisubmarine helicopters; from the Soviet Union it acquired numerous destroyers, missile boats, patrol vessels, minesweepers, eight KILo submarines, anti-submarine helicopters and maritime patrol aircraft; from Poland it acquired a few amphibious vessels; from Germany it acquired four TYPE 209 submarines and a fleet tanker; and from Korea it acquired six large patrol vessels.⁴² The most significant addition occurred late in this period and was short-lived, but was of considerable concern to most Western navies. It was the lease of a nuclear powered submarine from the Soviet Union which arrived in 1988 and was returned in 1991.⁴³ In addition they were able to finally begin domestic production of warships:

⁴¹ Rahul Roy-Chaudhury, *Sea Power and Indian Security*, Brassey's, 1995, 187-88.

⁴² G.M. Hiranandani, *Transition to Eminence*, Lancer, 2005, 28-29.

⁴³ Syd Goodman and Mrityunjay Mazumdar, "Where East Meets West, Part 2" at <http://www.bharat-rakshak.com/NAVY/History/1970s/East.html> (Accessed October 2006).

producing four LEANDER frigates, three GODAVARI frigates, four KHUKRI missile boats, and one MAGAR landing ship.⁴⁴ As the period concluded, India would find that its ability to both afford and acquire its defense needs would be put in peril by the fall of its leading defense partner, the Soviet Union. Despite these setbacks, their efforts increased the overall capabilities of their naval force immensely and laid the foundation for the growth of a domestic defense industry that could supply them with the resource needs of the future.

4. Maritime Strategy

The Indian maritime strategy continued to expand during this period and turned toward a bottom-up strategy.⁴⁵ A further opportunity to develop its maritime strategy was presented in 1982 with the change in international law by the UN Convention for the Law of Sea, which provided a newly demarcated Economic Exclusion Zone, and thereby enabled the Indian navy to expand its reach for the protection of India's offshore resources. As India took stock of this development it recognized that in addition to the expanded interests also revealed an additional category of threats which required a change in its force structure and forcing it to continue its pursuit of a blue water navy with extended reach into the vast expanse of the Indian Ocean. For the first time the Indian Ocean could truly be an 'Indian Lake' just as Nehru and others had prophesied. The 'Rajiv Doctrine' furthered this belief, but also revealed the duality of India's strategy. It executed its maritime security policy with a greater confidence, but it also remained committed to the Cold War framework and thereby consulted with the superpowers before committing to action.⁴⁶ In total, India grew to be accepted as the regional dominant power, but its actions and policies drew resentment from its South Asian neighbors and would require further development of its maritime strategy.⁴⁷

⁴⁴ G.M. Hiranandani, *Transition to Eminence*, Lancer, 2005, 28-29.

⁴⁵ Henry Bartlett et al., "The Art of Strategy and Force Planning" in *Strategy and Force Planning*, 3rd Edition, edited by the Strategy and Force Planning Faculty, Naval War College, 24-25.

⁴⁶ Sunanda Datta-Ray, "The Rajiv Doctrine: India as a Mini Superpower?" *The Statesman*, 13 November 1988, 7.

⁴⁷ C. Raja Mohan, *Crossing the Rubicon: The Shaping of India's New Foreign Policy*, Palgrave Macmillan, 2004, 239.

E. THE ERA OF POLITICAL ASCENDANCY (1990-2001)

Only after the end of the Cold War did India, for the first time, begin to be considered as an economic and military power and emerged as the world's fourth great power.⁴⁸ In order to further progress its political objectives and to respond to increasing aggression, Indian leadership made the decision to demonstrate its nuclear weapons capability during this period. Pakistan soon responded with its own demonstration and this had a convincing effect on the United States view of South Asia as a region of increasing importance.⁴⁹ Indian maritime strategy during this period became more expansive largely due to this increased perception of its enhanced international status and the increased responsibilities that came with it. India remained committed to liberalizing its economy and simultaneously sought to address the regional concerns of its military ambition. In order to present India and its military power in a friendlier context, India began to demonstrate the soft power of its military as well. The end of the Cold War presented two immediate problems for India: a change in the international balance of power, which created a more unipolar world; and the replacement of one of India's critical trading partners, the USSR, by a much diminished Russia. Both of these problems forced India to consider its strategic options. India began to "chart a new course" which included increased indigenous defense production capability and diversification of its trading partners to maintain the supply of necessary defense acquisitions.⁵⁰

1. Threats

The threat to Indian maritime interests expanded during this period as a result of a resurgent state-sponsored threat and the emergence of the threat from non-state actors, but was not significant enough to cause concern among Indian leadership and thereby force them to commit more funds to the Indian navy. Indian leadership remained committed to building its domestic economy. The threat from Pakistan remained critical despite India's nuclear demonstration in 1998. Pakistan demonstrated its willingness to

⁴⁸ Dilip Mohite, "India: the Fourth Great Power" at www.acdis.uiuc.edu/Research/S&Ps/1993-Sp/S&P_VII-3/great_power.html (Accessed October 2006).

⁴⁹ Rafiq Dossani and Henry S. Rowen, "Introduction" in *Prospects for Peace in South Asia*, Edited by Rafiq Dossani and Henry S. Rowen, Stanford University Press, 2005, 9.

⁵⁰ G.V.C. Naidu, *The Indian Navy and Southeast Asia*, Knowledge World Press, 2000, 16.

continue its rivalry with India with renewed aggression in the 1999 Kargil war and the Indian navy prepared to ensure it would be prepared for a war with Pakistan. The development of the Pakistani navy did not represent a significant improvement during period. Its force structure remained largely the same as it acquired three maritime patrol aircraft⁵¹ from the United States in 1996 and one advanced submarine⁵² from France in 1999: but this did not present an immediate threat as it would take time to become operational. The threat from China remained a major concern. China's navy had been rapidly expanding its capabilities since the early 1970's, and this also coincided with a perceived expansion of its interests in the IOR. By 1987 it was the third largest navy in the world and was increasingly viewed as a power-projection navy.⁵³ India's diplomatic efforts made this confrontation less likely, but the Indian navy planned for the contingency nonetheless. A third potential threat to Indian interests gained popularity in this period and drove naval expansion was the idea of a united Muslim naval threat from Indonesia, Iran and Pakistan.⁵⁴ The other maritime nations of the IOR did not represent a significant threat to India or its navy either, but undue influence by Chinese expansion represented a direct threat to India's sphere of influence. The Indian navy's mission during this period was expanded to control Chinese influence in the IOR.

The overall threat from non-state actors did increase during this period but its manifestation in the maritime domain was less recognizable to Indian leaders. The threat originated from a variety of transnational and subnational groups that were responsible for much of the social unrest in South Asia.⁵⁵ These groups were made more effective by the proliferation of small arms that they receive via the sea lanes from Southeast Asia

⁵¹ Information acquired from the Pakistani navy website at www.paknavy.gov.pk/history.htm (Accessed October 2006).

⁵² Information acquired from the Pakistani navy website at www.paknavy.gov.pk/agosta90.htm (Accessed October 2006).

⁵³ James Zientak, *China and India: The Struggle for Maritime Supremacy in the Asia-Pacific and Indian Ocean*, Naval Postgraduate School, 2000, 48.

⁵⁴ Raju, G. C. Thomas, *India's Security Environment Toward the Year 2000*, Strategic Studies Institute, 14.

⁵⁵ For more information see Maya Chadda, "International Dimensions of Ethnic Conflict," in *South Asia in World Politics*, Edited by Devin Hagerty, Rowman and Littlefield Publishers, 2005.

through the Bay of Bengal and from the Middle East through the Arabian Sea.⁵⁶ Some believed that maritime violence was growing in the Indian Ocean, primarily due to the continued presence of piracy and the entry of terrorists.⁵⁷ What was certain was that the Indian navy would need to respond to this threat in the near future.

2. Interests

In the aftermath of its assertion of regional power in the previous period, India sought to improve its image and demonstrate its ability to exercise ‘soft power.’ India’s interests in this period remained committed to its security and economic interests, but also expanded into the political dimension. India sought to improve its relations with its neighbors to the southeast. Its ‘Look East’ Policy also brought a diplomatic mission for its navy. This period marked an increase in naval visits to countries of Southeast Asia would create good foundation for the years to come as India tackled the many problems of sustaining security and stability. One of those issues was smuggling. Whether it be narcotics or small arms, India sought to curb its movement through the Indian Ocean because its threat to Indian security.⁵⁸

3. Capabilities

With the economic and political demise of its leading defense partner, India considered new sources for the acquisition and production of its defense needs. In addition, while its economy continued to grow and its military received a generous allotment, its navy did not benefit significantly through acquisition or production. This era is largely considered a period of “neglect and downsizing” for the Indian navy.⁵⁹ The navy’s warships largely represented 1950’s and 1960’s era makeup, with the number of principal combatants shrinking during this period. Its first aircraft carrier, INS Vikrant, decommissioned in 1997 and the second one, INS Viraat, is plagued by age and persistent breakdown, thus its longevity was questionable. Therefore the navy sought a replacement in 1997, which began the plan to acquire the Russian carrier, Gorshkov, and

⁵⁶ International Action Network on Small Arms (IANSA) Study on South and Central Asia <http://www.iansa.org/regions/scasia/scasia.htm> (Accessed October 2006) or Subhash Kapila, “Proliferation of Small Arms and its Impact on India’s Security,” at <http://www.saag.org/papers18/paper1745.html> (Accessed October 2006).

⁵⁷ Jane’s Information Group Study “Trends in Maritime Violence – July 1996: The Red Sea, the Gulf of Aden, the Persian Gulf and the Indian Ocean.”

⁵⁸ India Ministry of Defence Report 2000, National Security, 4.

⁵⁹ G.V.C. Naidu, *The Indian Navy and Southeast Asia*, Knowledge World Press, 2000, 96.

also coincided with an announcement by the Defense Minister to pursue indigenous production of a carrier.⁶⁰ But this capability was far in the future and represented the path that India was pursuing at this time, which was towards self reliance.

4. Maritime Strategy

Indian leadership in this period became satisfied with its navy's composition in this period and thereby stressed a core competency strategy.⁶¹ This is largely due to the perceived decrease of threat in the maritime domain from both state and non-state actors. So Indian leadership believed that while the threat to Indian interests from Pakistan and non-state actors increased, its manifestation in the maritime dimension did not warrant increased expenditure. One significant addition to India's maritime strategy was its role as a diplomatic tool. This added dimension served to bolster relations with its Southeast Asian neighbors and thereby increase the perception of rising India.

F. CONCLUSION

India's maritime strategy began as a fiscal-based strategy in the era of economic reconstruction, evolved into a threat-based strategy in the era of military buildup, further evolved into bottom up strategy in the era of economic liberalization and finally became a strategy of core competency in the era of political ascendancy. The evolution and expansion of Indian maritime strategy has enabled the Indian navy to become the fifth largest navy in the world and the most powerful navy in South Asia. At first design, it only enabled India to respond to a meager set of interests, threats due to its limited capabilities. By 2001 India's maritime strategy enabled it to respond to far reaching interests from the Red Sea to the Strait of Malacca, threats from a variety of state and non-state actors and was capable of responding to those threats with a more fully developed set of naval capabilities. Its maritime strategy had grown more ambitious, not only in its ability to promote security, but also in its ability to serve its economic and political interests as well. In total, India has developed and maintained a powerful navy, but its future strategy is uncertain given the present circumstances. It is faced with a different set of threats ranging from an increasingly hostile Pakistan, an uncertain threat

⁶⁰ Originally reported by the Deccan Herald, 11 August 1998 and cited in G.V.C. Naidu, *The Indian Navy and Southeast Asia*, Knowledge World Press, 2000, 100.

⁶¹ Henry Bartlett et al., "The Art of Strategy and Force Planning" in *Strategy and Force Planning*, 3rd Edition, edited by the Strategy and Force Planning Faculty, Naval War College, 28-30.

from a rising China, as well as the responsibility of maintaining security and stability in one of the most undeveloped regions of the world. Indian political and economic interests continue to expand, and this will undoubtedly require it's military to keep pace the future. National security in its maritime dimension requires a naval force that must continually be developed and maintained to provide it with the necessary capabilities to safeguard and promote an increasingly diverse array of economic and political interests. Without a proper analysis of the amalgamation of these factors, India's maritime strategy in the near future will remain ambiguous which will hamper the development of effective responses to threats by the Indian navy, as well as the maintenance of the security and stability of the region generally.

III. LOCATING INDIA'S STRATEGIC POSITION

It is necessary to begin by establishing India's strategic position in order to establish where India fits into the picture at the global, regional and sub-regional levels. India has recently emerged into the international limelight largely due to its economic growth. Since independence it has sought to play a leading role in world affairs and only recently has begun to show the competence to achieve its aspirations on a global, regional and sub-regional level.

India is currently a 'contender for major-power status' in economic, political and military terms.⁶² India has the fourth largest economy in the world in terms of purchasing power parity, showed an average GDP growth rate of 6.5% between 1991-2000 and appears to be making the necessary reforms to continue this growth for some time. One analysis projects India will continue to exhibit a 6 percent growth rate through 2020.⁶³ India's political maturation has also been noticed by some scholars.⁶⁴ India is now a consensus candidate for permanent membership on the United Nations Security Council, should that institution ever reform, as some have envisioned. India also possesses the third largest standing army and the fifth largest navy in the world. It has achieved this standing with relatively small burden on its economy, maintaining a relatively stable 2-3 percent of its GDP. In 2006 the defense budget is projected to eclipse \$20 billion and with India's current thirst for defense equipment, it will certainly grow.⁶⁵

India views itself as a partner in peace and prosperity with its Asian neighbors. As exhibited after the tsunami disaster in December 2004, India seeks to play a leading role in the security and stability of Asia, but wishes to share this leadership role with other Asian powers. India views its relations with key Asian leaders such as China and

⁶² Baldev Nayar and T.V. Paul, *India in the World Order*, Cambridge University Press, 2003, 259.

⁶³ Asuncion-Mund 2005 Project, Deutch Bank Research Report, "India as a Global Power?" December 16, 2005 via www.dbresearch.com (Accessed August 2006).

⁶⁴ Sumit Ganguly, "India's Foreign Policy Grows Up," *World Policy Journal* 20 no. 4 (Winter 2003/4).

⁶⁵ "India's Defence Budget Rises 7%, to \$20.11 Bn", <http://www.defenseindustrydaily.com/2006/03/indias-defense-budget-rises-7-to-2011-bn/index.php> (Accessed August 2006).

Japan as a precursor to establishing more influence in the region and has sought to create a more cooperative approach to security and stability in Asia. India adopted a Look-East policy in 1994 as part of an effort to increase its relations with its Indo-Asian neighbors. India has recently extended its coverage in its policy to include its Pacific neighbors as well.⁶⁶ India has also sought a greater role in regional security forums such as the Association of South-East Asian Nations (ASEAN) as a means to increase its role in Asian affairs.

As the largest, most populous and strongest economic and military power in the sub-continent India views itself as an arbiter of disputes in South Asia. Stability in the rest of South Asia remains a chief concern. Many of the surrounding countries continue to have internal security problems fomented by Islamist and Marxist movements. While India would prefer the whole of South Asia emerge as flourishing democracies, it understands through experience that it must continue engagement with the controlling regimes of each nation in South Asia.⁶⁷ Through this pragmatic approach, India hopes that all of South Asia will reap the benefits of India's global rise and South Asia will emerge as a more stable and secure region.

India's approach at each level may differ, but it is its firm belief that it should play a leading role in the security and stability of the global community that should be remembered. The tools of diplomacy for India include its perceived political, economic and military power. India has become a political and economic force to be reckoned with at all levels in recent times. As the military capabilities of India increase, India is likely to utilize this tool at the regional and global level as well. It is in this context that India's rise could be a threat to security and stability and must be viewed with skepticism by other key regional players.

⁶⁶ Indian Ministry of External Affairs Annual Report 2004-05, 23.

⁶⁷ Ibid., i-ii.

IV. UNLOCKING INDIAN NATIONAL INTERESTS

A. INTRODUCTION

India's propensity to use its defense forces to secure its national interests has never wavered. The Indian navy, like all others, exists to support the nation's strategic interests.⁶⁸ For India, those interests are defined as its security, economic and political interests, which its government and military view as interrelated and cyclical in nature.⁶⁹ Greater security provides fertile soil for economic growth and political ascendancy, economic growth provides for increased security and political ascendancy, and political ascendancy opens doors to enable greater security and economic benefits. In the course of examining each of India's interests, I will analyze its objectives, challenges and strategies to safeguard those interests. Finally, I will conclude each section by highlighting the progress of the Indian navy in achieving each of these objectives.

B. CATEGORIES OF NATIONAL INTERESTS

National interests can be organized into four categories: survival, vital, major, or peripheral.⁷⁰ Particular interests may change categories given different circumstances, with the exception of survival interests, whose preeminence is obvious. As the circumstances change, a vital interest may become only peripheral. For instance, in its 1965 war with Pakistan, the Pakistan navy's overall capabilities were not significant enough to threaten the survival of the Indian regime⁷¹ and so India chose to preserve its limited naval capabilities by concentrating its naval forces in the Bay of Bengal. As a result, Pakistan was able to attack the coastline at will, but as the Indians had predicted,

⁶⁸ Verghese Koithara, *Society, State and Security: The Indian Experience*, Sage Publications, 1999, 101.

⁶⁹ PM of India, Monmohan Singh, has mentioned this subject numerous times and most recently covered all three topics in his August 15th, 2006 Independence Day speech. In addition this concept is mirrored in the Indian Navy's 2004 doctrine, 63.

⁷⁰ The categories for defining national interests were obtained from John M. Collins, *Grand Strategy: Practices and Principles*, Naval Institute Press, 1973, 1-3. which were further defined for India in Gurmeet Kanwal, "India's National Security Strategy in a Nuclear Environment," in *Strategic Analysis* Vol. 24, No. 9, December 2000, located at www.ciaonet.org/olj/sa/sa_dec00kg01.html (Accessed July 2006).

⁷¹ The Indian economy at that time was less dependent upon external sources to sustain it and therefore a blockade was less effective, even if Pakistan had possessed the capability to enact a blockade.

was incapable of gaining a strategic advantage. This scenario is not as likely to occur today given the increase in Pakistan's naval capabilities and India's dependence upon its sea lanes to sustain its economy.

Survival interests are, self evidently, those that are critical to the existence of the government or nation-state. Threats to a nation's survival are often regarded by the leadership as synonymous with threats to national existence, and tend to lead to the same options: though they may all require concessions by those wishing to remain in power.

Vital interests are those that could result in serious harm to the security and well-being of the nation. They include its territory and vital infrastructure, the safety of its citizens at home and abroad, and the economic well-being of its society.⁷² India's current vital interests include its land borders, and its sea and air space, the credibility of its nuclear deterrent, and its economy which is highly dependent upon its energy security. India's dependence on external energy sources and the vulnerability of its supply routes make this an increasingly vulnerable vital interest.⁷³ Threats to these interests pose potential rather than imminent dangers and therefore allow leadership to pursue diplomacy before violence to safeguard them.

Major interests are those that have significant, but nevertheless limited potential for serious harm. They include preventing external conflicts within the region, such as the Afghan conflict and Sri Lankan civil war, safeguarding its immediate Economic Exclusion Zone (EEZ); and preventing "inimical external powers" from armed intervention, establishing military bases and undermining the Indian Ocean as a zone of peace.⁷⁴ Threats to these interests require a concerted effort to resolve, but are negotiable and, therefore, provide for greater flexibility in resolving disputes.

⁷² Gurmeet Kanwal, "India's National Security Strategy in a Nuclear Environment," in *Strategic Analysis* Vol. XXIV No. 9, December 2000, located at www.ciaonet.org/olj/sa/sa_dec00kg01.html (Accessed July 2006).

⁷³ Government of India's 10th Five Year Plan (2002-2007), Volume 1, 5.

⁷⁴ Gurmeet Kanwal, "India's National Security Strategy in a Nuclear Environment," in *Strategic Analysis* Vol. XXIV No. 9, December 2000, located at www.ciaonet.org/olj/sa/sa_dec00kg01.html (Accessed July 2006).

Finally, peripheral interests are those that are unlikely to require immediate action and, therefore, are accorded a wait and see approach. They include the well-being of the Indian diaspora and promotion of secular values and human rights. Threats to such interests do not routinely lead to conflict.

C. INDIA'S SECURITY INTERESTS

As in most countries, India's security interests are reflective of its historical memory. The partitioning of South Asia was a violent affair whose effects are still apparent in the residual instability of the sub-continent. Since that time, South Asia has been a conflict-prone region with a widespread epidemic of intra-state armed conflicts. Therefore, India's primary security objective is to establish a confrontation-free external environment, while realistically preparing for potential conflicts of the future.⁷⁵

There are numerous challenges which impinge upon India's achievement of its security interests. South Asia is plagued by intra-state armed conflicts, fundamentalist activism, terrorism, and political instability; all of which serve to threaten security and stability of India and the IOR. In addition, India has yet to resolve its own borders and this remains a critical concern of its leadership.⁷⁶ Within India's short history, it has fought four wars with Pakistan and China over border, ethnic and religious issues. In addition, there have been numerous conflicts and crises which can be attributed to the ethnic, religious and linguistic divides in the region. In total, there remains an "enduring rivalry" and "protracted contest" which is not constructive to the security and stability of the region.⁷⁷

India's response to its security challenges is twofold: on the one hand it is increasing its cooperation with its regional and global partners to create a more stable and secure environment, while it has also chosen to prepare its military for potential conflict. According to Defence Minister Mukherjee, "India's desire for peace and the use of diplomatic means for the resolution of all conflicts is unwavering. However, as a large and vibrant democracy with a diverse social religious and economic background of its

⁷⁵ PM of India, Monmohan Singh, August 15, 2006 Independence Day speech.

⁷⁶ PM of India, Monmohan Singh, April 15, 2006 Speech on the release of Jagat Mehta's book. He mentions this as an invitation for outsiders to intervene in Indian affairs.

⁷⁷ T. V. Paul, *The India-Pakistan Conflict*, Cambridge, 2005 and John Garver, *The Protracted Contest: Sino-Indian Rivalry in the Twentieth Century*, University of Washington Press, 2001.

peoples, the country finds that its peaceful stance must be backed by a credible military deterrent.”⁷⁸ In addition, India’s 2004 Defense report suggests that “this is sought to be achieved through a combination of defense preparedness, unilateral restraint, confidence-building dialogue, and expanding bilateral and multilateral interaction.”⁷⁹

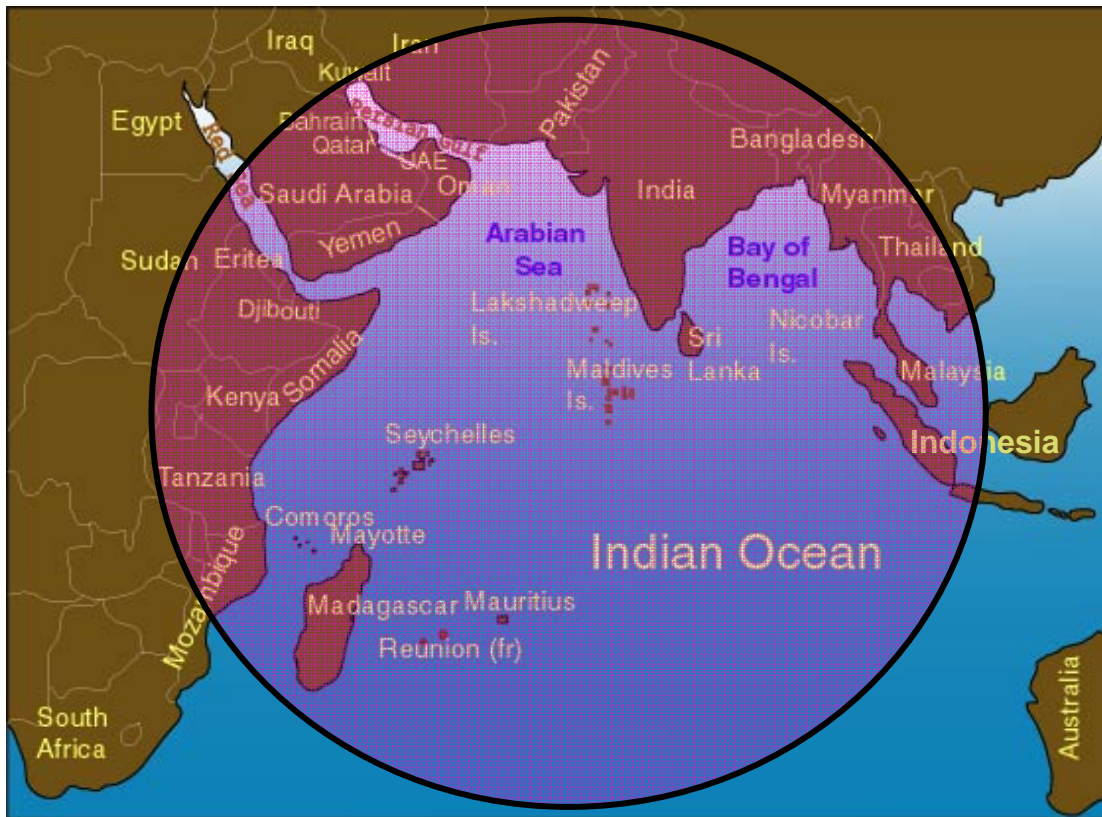


Figure 1. Indian Navy’s Area of Interest.

The Indian navy is the world’s 5th largest navy and is pursuing an expansive development and acquisition program to meet the evolving regional and global threats and also its expanding political and economic interests.⁸⁰ Its ability to support India’s national interests is expanding. India has developed a formidable navy which exceeds the capabilities of its littoral neighbors, but is also attempting to take greater responsibility of

⁷⁸ Address by Defence Minister Mukherjee at the Fifth IISS Asia Security Summit in Singapore on 03 June 2006.

⁷⁹ Government of India, 2005 Ministry of Defence Report, 12.

⁸⁰ “Indian navy to be Balanced in Ten Years”, <http://www.india-defence.com/reports/2299> (Accessed September 2006).

the entire IOR. The Indian navy's vision is to promote an "environment of peace and tranquility in the IOR to further India's political, economic, diplomatic and military objectives. [It] will deter war through strength, but if deterrence fails, [it] must strive to achieve victory over the adversary by [its] reach and firepower."⁸¹

The Indian navy's efforts are chiefly devoted to better protecting India's security interests from the surrounding states. The Indian navy has also recently decided to augment its current strategic forces by developing a ballistic missile-equipped nuclear submarine.⁸² In total, this provides a credible military deterrent for most state actors. The Indian navy is also using its strengths as a tool for improving the security of the smaller countries of South Asia. The Indian navy has worked extensively with Sri Lanka, Bangladesh and Myanmar to improve its maritime security and thereby improve the overall security of the IOR.

The Indian navy is also working to protect its security interests from non-state actors. It is extending its reach into the Indian Ocean Region to counter piracy, which according to the International Maritime Bureau is most prominent in the Indian Ocean Region and Southeast Asia.⁸³ Its efforts have resulted in a decreased amount of piracy in its immediate area, but will require further operational expansion to create a significant impact upon piracy in the entire IOR.⁸⁴ Its expanded presence also serves to interdict the small arms' proliferation which provides the weapons to many of the non-state actors, and thereby provides some utility in providing security to the interior.⁸⁵

The Indian navy has also worked hard with its regional and global partners to create a more stable and secure environment. According to the Indian Chief of Naval Staff, Admiral Arun Prakash, "India sees her navy as a force for good: assuring peace,

⁸¹ 2006 Indian Navy Vision Document at <http://indiannavy.nic.in/vision.pdf> (Accessed September 2006).

⁸² 2004 Indian Maritime Doctrine, 54.

⁸³ ICC International Maritime Bureau Piracy and Armed Robbery against Ships Report for the period 1 January – 30 June 2006, 14.

⁸⁴ ICC International Maritime Bureau Piracy and Armed Robbery against Ships Report for the period 1 January – 30 June 2006, 5.

⁸⁵ Subhash Kapila, "Proliferation of Small Arms and its Impact on India" at www.india-defence.com/reports/1623 (Accessed September 2006).

tranquility and stability in the IOR and building bridges across the seas.”⁸⁶ In the aftermath of 9/11, it patrolled the Strait of Malacca to ensure the safety and security of maritime shipping during that tense period. It also worked with many regional neighbors to bring relief to the people that were devastated by the December 2004 tsunami. In addition, it has hosted and been partner to numerous exercises with foreign military powers to enhance maritime security, bolster interoperability and improve relations.

On the whole, a strong and engaged Indian navy has served to bolster the security of its area of interest from state actors as well as non-state actors. India and Pakistan remain engaged despite increased tensions as a result of the Mumbai bombings, which is important for the long-term peace process and India’s security interests. In addition, India and China continue to work toward improving their relationship which can only enhance India’s security. Finally, the smaller South Asian states remain stable and secure for the time-being.

D. INDIA’S ECONOMIC INTERESTS

At the time of its independence, India was an appallingly poor country, whose leadership nevertheless had no difficult imagining that it might one day become a “great power.”⁸⁷ India pursued its independence through peaceful means and has sought to become a world power in the same manner. Rather than climbing the “great power” ladder through military force, India sought to concentrate on its economic development. Nehru’s strategies failed to secure its economic success in the early years, but his successors have continued the struggle and have made great progress toward that goal. Since 1991, India has turned the corner and become one of the leading economies in the world, most recently exhibiting an economic growth of 8 percent between 2002 and 2005.⁸⁸ The importance India has placed upon this endeavor is obvious when examining its strategic objectives.⁸⁹ Therefore, maintaining its economic growth is not only a primary economic interest, but a strategic one as well.

⁸⁶ Admiral Arun Prakash, “Future Strategy and Challenges for the Indian Navy” in *RUSI Defence Systems*, p.33 at www.rusi.org/downloads/pub_rds/Arun_Prakash.pdf (Accessed September 2006).

⁸⁷ Jawaharlal Nehru, speech on Asia to the Constituent Assembly, March 8, 1949, and cited in Stephen P. Cohen’s, *India: Emerging Power*, Brookings Institution, 2001, 230.

⁸⁸ PM of India, Monmohan Singh’s August 15th, 2006 Independence Day speech.

⁸⁹ Government of India, May 2004 National Common Minimum Program, 2 and Government of India’s 10th Five Year Plan (2002-2007), Volume I, 5.

There are numerous challenges which impinge upon India's achievement of its economic interests. Before the early 1990's, the international climate did not support India's economic growth due South Asia's relative lack of importance to either the United States or the Soviet Union.⁹⁰ A significant challenge today is the growth and maintenance of a climate that supports India's economic growth. To accomplish this, India will be forced to pursue a more influential role in regional and global forums.

Another significant challenge is the need to maintain security and stability which will enable growth, and encourage investment and trade.⁹¹ India's inability to resolve its security issues with Pakistan is one of the chief reasons it has been unable to take advantage of its geographic location to improve its economic performance. A solution with Pakistan would enable India to make land connections with the Middle East and Central Asia, which currently houses the largest energy supplies in the world. This brings us to another significant challenge to India's economic interests. India is an energy deficient country and this has forced the government to pursue more expansive energy security policies in order to maintain economic growth.⁹² PM Singh stated that India's future energy needs by 2030 would be 4 to 5 times higher if its economy was required to maintain its current growth levels.⁹³ He further underscored the "vital" importance of increased supplies and access to energy in order to maintain India's current growth level. Additional challenges that have been cited include an undersized local industrial infrastructure, the lack of a robust level of Foreign Direct Investment (FDI), China's simultaneous rise, which competes with India in the same markets, and India's own internal reforms in agriculture, industry and services.⁹⁴ While India has never gone to war over its economic interests, the pressure to keep its economy rising will inevitably present Indian leadership with some challenging decisions in the future.

India's response to its economic challenges is twofold: it has initiated a cooperative approach in concert with its "Look East" policy to engage with the East

⁹⁰ C. Raja Mohan, *Crossing the Rubicon: The Shaping of India's New Foreign Policy*, Palgrave Macmillan, 2004, 261.

⁹¹ PM of India, Monmohan Singh's March 18th, 2006 Asian Corporate Conference Speech.

⁹² Government of India, May 2004 National Common Minimum Program, 22.

⁹³ PM of India, Monmohan Singh's July 26th, 2006 Energy Conclave Speech.

⁹⁴ Government of India, May 2004 National Common Minimum Program, 21.

Asian Tiger economies and utilize their momentum and experience to propel India's growth, while also emphasizing increased efficiency to encourage the development of more sound practices and reduce waste. This strategy has been incorporated into many of India's policy documents. PM Singh noted in his Red Fort Speech that there has been a significant expansion of economic links with the United States, China, Japan, European Union, Russia, Southeast Asia, the Gulf and Arab world, as well as the continents of Africa and Latin America in order to further its interests and pursue a secure and stable environment that will enable efficient growth.⁹⁵ In addition, India has pursued more cost-effective and long-term alternatives to meet its energy requirements, to include the U.S.-India Nuclear deal which is a critical requirement for the maintenance of its economic growth.⁹⁶ India is also undergoing a reform process to liberalize portions of its industrial sector and thereby enable economic growth to be more sustainable.⁹⁷

The Indian navy's ability to support India's economic interests is expanding as well. As mentioned before, Indian leadership views its security and economic interests as enablers of each other. Therefore, the Indian navy has initiated efforts to better secure India's vital lines of communication which will bolster the confidence in its economic security and encourage greater FDI. In addition, the Indian navy has sought to improve its neighbor's ability to support maritime security efforts by transferring some of its aging platforms to its littoral neighbors.⁹⁸ Sri Lanka and Maldives have both been the recipient of Indian naval platforms. It has also recently set about to acquire more maritime patrol aircraft in order to expand its reach into the Indian Ocean and, thereby, provide for a more secure environment for shipping in the heavily pirated waters of the IOR.⁹⁹

The Indian navy is also supporting India's economic interests by becoming more self-sufficient. While this is not something that is providing immediate payoff, the long

⁹⁵ PM of India, Monmohan Singh's August 15, 2006 Independence Day speech.

⁹⁶ For background information on the U.S.-India Nuclear deal see Esther Pan's "US-India Nuclear Deal" Congressional Research Service Report for the Council on Foreign Relations, February 24, 2006. For a more current report see Michael Levi's "US-India Nuclear Cooperation: A Strategy for Moving Ahead", Council on Foreign Relations Press, June 2006.

⁹⁷ Government of India, May 2004 National Common Minimum Program, 21.

⁹⁸ "India's Navy holding Maritime Patrol Aircraft Competition (Updated)", <http://www.hindu.com/2006/04/17/stories/2006041706371200.htm> (Accessed September 2006).

⁹⁹ "India Transfers Naval Ship to Maldives", <http://www.defenseindustrydaily.com/2006/04/indias-navy-holding-maritime-patrol-aircraft-competition-updated/index.php> (Accessed September 2006).

term payoff is potentially immense. As India's shipbuilding industry gains more experience and capability, it will become less dependent upon expensive foreign military sales such as the Russian Carrier Gorshkov, which cost an exorbitant 1.5 billion U.S. dollars.¹⁰⁰ In addition, the expansion and maturation of the shipbuilding and arms industry will further India's economic interests by providing opportunities for future arms sales and would undoubtedly contribute to India's economic growth potential.

On the whole, the Indian navy has furthered India's economic interests by ensuring a more secure environment to encourage economic growth and implementing plans to become more self-sufficient. India remains poised to continue its strong economic growth, exhibiting an estimated growth of 8.1 percent in 2005-06.¹⁰¹ In addition, India's willingness to support its neighbor's security and economic growth will ultimately contribute to its own long-term economic interests. India's improved economic policies and planning will enable it to become less reactionary and thereby provide greater economic security in the long run.

E. INDIA'S POLITICAL INTERESTS

India's political interests are reflective of its historical identification as "one of the world's largest and most enduring civilizations," a certain belief in its "existing geopolitical status (sub-continental size and large population)," and the perception of its "potential economic and military power."¹⁰² India's pursuit of this international role was an uncertain one in its early years, but has become more visible in recent times. India, in the wake of independence, did not exhibit a mature and confident foreign policy, possess a robust economy, or have sufficient military capabilities to safeguard its interests and therefore seemed unable to climb the ladder of "great power" status. Before 1990, India was viewed as a "permanent protester in the international system."¹⁰³ Its stasis was finally ended following reforms by Rajiv Gandhi and more open relations with the West, which made it more amenable to the international system that survived and dominated in

¹⁰⁰ John Cherian, "The Gorshkov Deal", <http://www.hinduonnet.com/fline/fl2103/stories/20040213003603500.htm> (Accessed September 2006).

¹⁰¹ Government of India, Ministry of Finance Economic Survey 2005-2006.

¹⁰² Baldev Raj Nayar and T.V. Paul, *India in the World Order: Searching for Major-Power Status*, Cambridge University Press, 2003, 3.

¹⁰³ C. Raja Mohan, *Crossing the Rubicon: The Shaping of India's New Foreign Policy*, Palgrave Macmillan, 2004, 262.

the post-Cold War era.¹⁰⁴ The India of today possesses a more mature and confident foreign policy which is evident in its increased status as a member or observer in the many regional and global forums it has joined since 1990. It has also improved its economic status becoming the fifth largest economy in the world in terms of purchasing power parity. Finally, it has developed and maintained a robust and diversified military capability that can better safeguard its national interests. These are the critical components which have enabled India to rise in political stature, and can contribute to its inclusion among the world's political leaders. The attainment of this goal remains India's primary political objective.¹⁰⁵

There are numerous challenges which impinge upon India's achievement of its political interests. No issue has dominated India's foreign policy since independence than that of Pakistan and the Kashmir issue. These countries have fought three wars and two lower intensity conflicts over the span of 60 years. This political issue has become so divisive that it has forced external powers to become polarized on the issue, supporting either India or Pakistan. Pakistan's continued proxy war to wrest control of the Kashmir region from India is one of the most significant challenges to India's political interests, and represents a major constraint to India's continued rise.¹⁰⁶ This challenge was further complicated in 1998 when both countries announced their nuclear capability. Thereafter, the international community has taken a greater interest in India-Pakistan relations in order to forestall an escalatory nuclear conflict.

Another issue that impinges on India's political interests is China's concurrent rise in East Asia. Both countries have large populations, robust economies and formidable military forces, with overlapping areas of political and economic influence. This has led to a "protracted contest."¹⁰⁷ Finally, India is challenged by the unipolar

¹⁰⁴ C. Raja Mohan, *Crossing the Rubicon: The Shaping of India's New Foreign Policy*, Palgrave Macmillan, 2004, 262.

¹⁰⁵ PM of India, Monmohan Singh's September 19th, 2004 speech on his departure to address the UN General Assembly and reiterated in his September 15th, 2006 Speech at the XIV Non-Aligned Movement Summit in Havana, Cuba.

¹⁰⁶ For a more thorough examination see Sumit Ganguly, "Will Kashmir Stop India's Rise?", *Foreign Affairs*, Vol. 85 no. 4 (2006), 45-56.

¹⁰⁷ For a more thorough examination of this conflict see John Garver, *The Protracted Contest: Sino-Indian Rivalry in the Twentieth Century*, University of Washington Press, 2001, 3-31 and 110-137.

system which dominates the world today and seeks to replace it with a multi-polar system that would provide greater benefit to its political interests as well as many others. India's involvement in the 1971 war was initiated to further its political interests, and will likely resort to violent means in the future if the circumstances are required, especially given its perception of the interrelationship between its security, economic and political interests.

India's strategy to achieve its political interests is two-fold: It has chosen to increase its role in regional and global forums in order to gain a wider voice in international affairs, and it has also sought reform in the United Nations. India has cast a wide net in its efforts to increase its role in regional and global forums. India has pursued closer relations with Association of South-East Asian Nations (ASEAN) and the Southeast Asian countries, becoming a member of the Regional forum in 1996. India has continued its attempts to make the South Asian Association for Regional Cooperation (SAARC) an important entity, but it has failed to gain the same significance as that of ASEAN. India also became a member of the Shanghai Cooperative Organization in 2005 in order to better access the resources of the Central Asian countries and improve its bargaining position vis-à-vis China. India's ability to initiate change in the international system by directly challenging the United States is limited. As such, it has pursued its interests by seeking to change the international system indirectly. India seeks reform of the UN and its Security Council in order to give it greater relevance in the current international system. The United States has traditionally sought to pursue its interests, and utilized the UN as a source to legitimize its efforts, given the almost guaranteed Soviet opposition during the Cold War. Since the end of the Cold War, the United States has found it less necessary to legitimize its pursuit to the UN and pursued its interests unilaterally. This has served to undermine the power of the United Nations and its Security Council. As part of the Group of Four (G4), India seeks reform of the Security Council in order to "enhance the UN's capacity to meet the challenges of the future" and will coincidentally further its political interests.¹⁰⁸

¹⁰⁸ PM of India, Monmohan Singh's September 19th, 2004 speech on his departure to address the UN General Assembly and reiterated in his September 15th, 2006 Speech at the XIV Non-Aligned Movement Summit in Havana, Cuba.

The Indian navy's ability to support India's political interests has been based upon a two-pronged strategy: to build strong relations through overseas deployments, and maritime exercises and training with our immediate neighbors in the IOR and countries of strategic interest, as well as taking part in humanitarian service missions to demonstrate India's compassion and provide aid to those in need. As part of its effort to build stronger relations, the Indian navy has initiated exercises with many countries of strategic significance. In 2003, the Indian navy conducted exercises with the United States navy, Russian navy, French Navy, Chinese (PLA) navy, Indonesian navy, the Royal navy of Oman, and many of the littoral navies of the IOR. It also conducted a series of overseas deployments to over 45 nations to "build bridges of friendship" across the oceans.¹⁰⁹ On January 23, 2003, the INS Tarangini began a 34,923 nautical mile voyage to circumnavigate the globe which concluded on 25 April, 2004. In 2004, the Indian navy conducted exercises with the Republic of Singapore, the French navy, the British "Royal" navy, the Indonesian navy, and the United States navy. It also conducted operations off Mozambique in support of the World Economic Forum Meeting, sent a team that successfully scaled Mount Everest, and a series of overseas deployments that included numerous port calls in a concerted effort to "present its culture and heritage whilst imbibing those of the visiting nation to showcase our vast technological and industrial advancements."¹¹⁰ In 2005, the Indian navy conducted exercises with the Royal navy of Oman, Singapore navy, French navy, Russian navy, United States navy, Indonesian navy, and the Royal Thai navy. It also conducted a series of overseas deployments to 30 countries in Europe, the Persian Gulf, the Red Sea, the South China Sea and the IOR and in recognition of "the criticality and centrality of foreign cooperation in the maritime sphere," created the Directorate of Foreign Liaison to coordinate future events.¹¹¹

The Indian navy's ability to support humanitarian service missions was significant, but has increased in the aftermath of the December 2004 tsunami. In 2003,

¹⁰⁹ Indian Navy Events -2003 "Tacking the Blue Waters" at www.indiannavy.nic.in/events2003.pdf (Accessed September 2006).

¹¹⁰ Indian Navy Events -2004 "Excellence in Three Dimensions" at www.indiannavy.nic.in/events2004.pdf (Accessed September 2006).

¹¹¹ Indian Navy Events -2005 "Reaching out to Maritime Neighbors" at www.indiannavy.nic.in/events2005.pdf (Accessed September 2006).

the Indian navy provided flood relief operations to the country of Sri Lanka and continuous support to maritime authorities for Search and Rescue (SAR). In 2004, the Indian navy provided assistance to the Mumbai Port Trust during a flash strike to facilitate the movement of vessels in/out of harbor for a brief period of time. Also in the 2004, the Indian navy conducted numerous SAR and diving operations to rescue and recover fishermen lost at sea and began a lengthy response to the December 26, 2004 tsunami. In 2005, the Indian navy continued its support to the tsunami relief operations deploying its ships and aircraft to the Maldives, Sri Lanka and Indonesia. This provided valuable lessons learned and highlighted the critical need for increased sea-lift capabilities within the Indian navy. The Indian navy also provided flood relief to Mumbai and Andhra Pradesh and offered its assistance in response to Hurricane Katrina which devastated New Orleans and the United States' Gulf coast.

On the whole, the Indian navy's confident, competent and visible maritime presence has served to build stronger relations and demonstrate an "abundance of empathy" to the many nations which it has come into contact.¹¹² Its emphasis on international cooperation has significantly contributed to its overall political objectives through its training and exercises with foreign partners and providing much-needed relief in response to numerous natural disasters and crises. This demonstration of the Indian navy's professionalism, reach, and sheer competence is what the Indian navy is counting on to "win friends and influence people."¹¹³

F. CONCLUSIONS

India's national interests have certainly expanded in the current era. India views its security, economic and political interests as co-determinant. Therefore, it will become increasingly important for external powers to understand this view in order to prevent crossing one of India's strategic tripwires. India's primary national interest is its continued political, economic and military ascendance to becoming a great power. This

¹¹² Indian Navy Events -2005 "Reaching out to Maritime Neighbors" at www.indiannavy.nic.in/events2005.pdf (Accessed September 2006).

¹¹³ Admiral Arun Prakash, Indian Naval Chief of Staff, November 2005 speech on "Shaping India's Maritime Strategy: Opportunities and Challenges" at www.indiannavy.nic.in/cns_add2.htm (Accessed September 2006).

has been the goal since independence, and though it has wavered at times, India seems more capable now than ever of achieving this objective. The Indian navy has been identified as one of the key enablers of this objective.

V. THREATS TO INDIA AND ITS NAVY

A. INTRODUCTION

Strategies exist, above all, to counter threats. A credible threat must have both intent and capability. A threat is defined as challenge to the national interests of India within its perceived area of interest. India's maritime area of interest was recently defined by its Chief of Naval Staff recently when he said that "whatever happens in the IOR can impact crucially on our security and should be of interest to our maritime forces."¹¹⁴ This area, better defined, extends from the east coast of Africa and the Persian Gulf region in the west to the Strait of Malacca in the east. Many of India's threats are traditional, but there is a newly emerging dynamic non-traditional threat which is one that India must confront in order to secure its interests.

The maritime domain presents significant security challenges for even the most capable of countries. The United States possesses the most capable naval force of all time, and yet even it is incapable of meeting all the challenges that are presented in today's maritime sphere. For India, its area of interest is much smaller, but presents all of the same challenges in terms of threats. The United States National Strategy for Maritime Security defined these threats as traditional and non-traditional and this definition is equally useful in the Indian context.¹¹⁵ In this framework, traditional threats are those posed by other states. Non-traditional threats are those that arise from transnational or criminal activity. Traditional threats will be analyzed in the first section of this chapter. For India, these threats are most often reflected as concentric circles which begin on India's center and extend toward the periphery of its area of interest. In the second section the non-traditional threat will be analyzed. For India, these threats have been defined as terrorism, piracy, smuggling, and, due to their frequency in South Asia, natural disasters.¹¹⁶

¹¹⁴ Address by Indian Naval Chief of Staff Arun Prakash at the National Defence College, November 2005, 3.

¹¹⁵ United States National Strategy for Maritime Security, September 2005, 3.

¹¹⁶ Address by Minister of Defense Pranab Mukherjee at the Carnegie Endowment for International Peace in Washington D.C. July 2005.

B. TRADITIONAL THREATS

The traditional threats for India and its navy is often reflected as concentric circles which begin on India's center and extend toward the periphery of its area of interest.¹¹⁷ Threats that reside in the innermost circle are those that lie within the immediate vicinity of India's maritime domain. These include Pakistan and India's smaller South Asian neighbors – Nepal, Bhutan, Bangladesh, Burma, Sri Lanka and the Maldives. Nepal and Bhutan are both landlocked and therefore are not as significant of a factor in the maritime equation. Threats that reside in the middle circle are those that lie on the periphery of the IOR. These include the Persian Gulf and Southeast Asian regions. Threats that reside in the outermost circle are those of external powers that present a significant challenge to India because of their intervention in South Asian affairs. China, which might be considered part of the inner circle by virtue of sharing a land border with India, is moved to the outermost circle in maritime terms because the two nations do not share a maritime boundary. The United States must also be considered in this group.

1. Pakistan

Pakistan is the only country in South Asia that directly challenges India's dominance and, therefore, poses an immediate threat to Indian security. Pakistan was severed from colonial India due to its belief that it could not survive while subordinated to Hindu rule and though Indian Muslims have prospered, the issue of Hindu hegemony over Muslims remains contentious. The issue of Kashmir captures the significance of the conflict. It is the most significant issue between these two nations, and one that has served to destabilize the entire region for many years. This state's importance to the national identity of both nations' cannot be understated. The fact that both countries went nuclear in 1998 has done little to resolve this issue. Long term security and stability in South Asia will only be accomplished by resolving this critical issue, but neither side has been willing to alter its stance, so the competition continues. The unity of Pakistani Muslims is based on this issue and so a solution to this problem is probably not in the interest of Pakistan, even if the solution is in its favor.

¹¹⁷ The origin of this theory remains unclear, but the idea of concentric rings is a common theme that is utilized by a wide variety of scholars to describe India's strategic thought process. Here are a few of the most recent descriptions. C. Raja Mohan, "India and the Balance of Power" in *Foreign Affairs*, Vol. 85, No.4, July/August 2006, 18. Stephen P. Cohen, *India: Emerging Power*, Brookings Institution Press, 2001, 232.

a. Defining the Threat

The threat from Pakistan comes in many forms: historical, ideological and political. Historically, the conflict between the residents of these two nations has been evident for centuries. The origins lie in the forced subjugation of the Hindus during the Mughal period. The conflict continued even into the era of colonial rule by the British, in which they altered the makeup of society by elevating the Hindu position above that of their Muslim counterparts. The conflict can also be attributed to the “cupidity of the British in their failed management of the partition.”¹¹⁸ While the conflict has historical roots in the previous periods, it is most accurately defined by the most recent manifestation which has persisted since independence in 1947. In the aftermath of partition, the mass migration of the population of British India into a Muslim Pakistan and Hindu India resulted in the death of tens of millions. The most recent conflict began with blood shed during that migration. Lawrence Ziring accurately describes the graphic nature of this relationship when he said “The hateful venom that was released in the orgy of partition infected India-Pakistan relations from that time forward. Each saw the other as a determined foe, and each was equally determined to defend itself from the other at any cost.”¹¹⁹ Since partition this conflict has resulted in three large-scale wars and many small-scale operations which have served to make this an “enduring and protracted conflict”.¹²⁰

The threat from Pakistan is also ideological, in that conflict exists between the two dominant religious groups in South Asia – Hindus and Muslims. As mentioned previously, the conflict began centuries ago between these two groups and the conflict has persisted largely as a result of an unwillingness of either to be further subjugated. Stephen Philip Cohen suggests that India perceives Pakistan as representing a cultural threat because Hinduism has always been “the odd man out” with Islam and Christianity dominating the subcontinent since the seventh century of the Christian Calendar.¹²¹ Dossani and Rowen’s examination of the conflict revealed that both countries possess

¹¹⁸ Stephen P. Cohen, *India: Emerging Power*, Brookings Institution Press, 2001, 198-199.

¹¹⁹ Lawrence Ziring, *Pakistan at the Crosscurrent of History*, Oneworld Publications, 2003, 42.

¹²⁰ Baldev Raj Nayar and T.V. Paul, *India in the World Order: Searching for Major-Power Status*, Cambridge University Press, 2003, 83.

¹²¹ Stephen P. Cohen, *India: Emerging Power*, Brookings Institution Press, 2001, 201-202.

radical segments of its society and advocate for the destruction of the other.¹²² In Pakistan it began with Maulana Maududi's Jamaat-i-Islami (Party of Islam) and was fanned by leaders such as Mohammad Zia al-Huq. In India it was the Rashtriya Swayamsevak Sangh (RSS) and its affiliates which now is associated with the Bharatiya Janata Party. In both countries these parties took a back seat to the politics of their founding fathers, Jinnah and Nehru, but both have found a way to persist and even rise to prominence at times. The periods of their rise often coincide with periods of increased tension between India and Pakistan.

The threat from Pakistan is also political. With the departure of the British, a power vacuum was revealed. And though India is immensely larger in size and population, it has been unable to convince the West and the developing world of its hegemony due to the persistent conflict with the smaller Pakistan.¹²³ Some scholars believe that Pakistan intends to reduce India in size, by encouraging internal disorder of India's diverse polity to further partition the subcontinent.¹²⁴ The territorial reorganization would thereby enable the Hindu population to come under Muslim rule as it had during the Mughal period. The Indian leadership, in recognition of Pakistan's divisive attempts, has made it a point of emphasis and promises to do "whatever is required to deal with the challenge at hand."¹²⁵

b. Threat to India and Its Navy

According to a current study by Cordesman and Kleiber, the Pakistan navy is roughly one-half the size of India's in terms of personnel and only one-fifth the size of India in terms of naval combat vessels.¹²⁶ While Pakistan suffers from a quantitative disadvantage vis-à-vis the Indian navy, it has tried to emphasize the overall quality of its naval combat vessels as the decisive factor in a naval clash with India. This qualitative

¹²² Rafiq Dossani and Henry S. Rowen, Editors, *Prospects for Peace in South Asia*, Stanford University Press, 2005, 4.

¹²³ Baldev Raj Nayar and T.V. Paul, *India in the World Order: Searching for Major-Power Status*, Cambridge University Press, 2003, 83.

¹²⁴ *Ibid.*, 88.

¹²⁵ PM of India, Monmohan Singh, July 12, 2006 Address to the Nation following the Mumbai bombings.

¹²⁶ Figures for personnel and naval combat ships were extracted from Anthony H. Cordesman and Martin Kleiber, *The Asian Conventional Military Balance in 2006*, The Center for Strategic and International Studies, June 2006, 26 and 111.

difference is being eroded by India's recent acquisitions and is likely to result in India developing quantitative and qualitative advantage over the Pakistani navy. This has mostly been possible through India's sizeable defense budget in relation to Pakistan's. The defense burden on India's economy is relatively low, at 2-3 percent, while Pakistan's is relatively high, at over 10 percent.¹²⁷ So over the long term, India has proven more capable of absorbing the high costs of its enduring conflict with Pakistan, and seems likely to continue to do so.

Pakistan's naval fleet is a modest but effective coastal defense force. Its surface fleet is comprised of mostly aging vessels acquired from the United Kingdom, France and China. It consists of one Gearing class destroyer, eight Amazon and Leander class frigates, ten patrol craft and three mine warfare vessels. Pakistan will need to commit to the acquisition of more vessels in order to maintain an effective deterrent. Its submarine fleet represents the most potent offensive weapon of the Pakistani navy. It consists of 11 submarines of French origin. The Agosta-90 submarine is its newest and most potent submarine which it hopes to utilize as a nuclear strike platform in the future. When this is achieved it will provide a second-strike capability and thereby increase the credibility of Pakistan's nuclear deterrent.

The Pakistani navy also possesses a modest naval air arm. It was developed in the aftermath of the 1971 war and represents another qualitative advantage that Pakistan hopes to utilize in a potential conflict with India.¹²⁸ The force is composed of French Atlantic, F-27 FOKKER and P-3C land-based maritime aircraft which are operated by the Pakistani Air Force. It recently acquired eight more P-3C in 2005 which will inevitably boost Pakistan's surveillance capability.¹²⁹

Another significant factor that contributes to the Pakistani qualitative advantage over the Indian navy is the quality of operational and educational training that its naval officers receive. In the past, the Pakistani navy did possess a decisive advantage

¹²⁷ R.S.N. Singh, *Asian Strategic Military Perspective*, Observer Research Foundation, 2005, 56 and 238.

¹²⁸ For more thorough detail see <http://www.paknavy.gov.pk/aircraft.htm> (Accessed October 2006).

¹²⁹ "Pakistan Receives Eight American P-3C Maritime Patrol Aircraft", <http://www.pakistanidefence.com/news/FullNews/2005/October2005/PNReceivesP-3C.htm> (Accessed October 2006).

in that it was able to conduct operational training with the United States Navy, the most capable force in the world. This provided Pakistan with superior training and operational experience, but since 2001, the Indian navy has also made this a point of emphasis in order to reduce the qualitative advantage that Pakistan held.

The Pakistan navy possesses a distinct disadvantage in terms of geography and characteristics of its port facilities. Its primary port at Karachi is very close to India's bases along the Gujarat coast and possesses very shallow approaches and long channel that could be easily mined. India used this to its advantage during the 1971 war with Pakistan by blockading Karachi. Pakistan has since committed to constructing a deep sea port at Gwadar and an additional port at Ormara to provide greater strategic depth. With two additional ports for its military and shipping to conduct operations out of, Pakistan is much less vulnerable to Indian attempts to blockade its military, but also in India's ability to strangle the Pakistani economy.

Since the 1971 war, the Pakistani navy has attempted to regain its credibility as an effective fighting force. Given the Indian navy's increasingly quantitative and qualitative advantage, it will require significant acquisitions to preserve its deterrent capability. Given the Indian navy's decisive advantages, the Pakistan navy is more dependent upon the element of surprise and this is a potentially destabilizing factor. The acquisition and development of a second-strike capability on the Agosta-90 submarine would enhance Pakistan's strategic deterrent so long as they could avoid detection by the Indian navy. In total, the Pakistan navy possesses a modest naval force which poses a moderate threat to the Indian navy.

2. Neighboring Small States

The security environment in South Asia is also complicated by the lack of effective governance by many of India's smaller neighbors which has led to persistent internal instability. The most significant challenges that India's neighboring small states pose for it is in the continued internal instability. It is feared that each could result in a failed state and this would unnecessarily draw extra-regional involvement. This increasingly requires an Indian response through the effective projection of force on short notice (as it did to prevent a coup in the Maldives in 1988) to maintain stability and

security along the Indian periphery.¹³⁰ But India has become more reluctant to interfere in the internal affairs in the wake of its operations in Sri Lanka in 1988-90 which led to an embarrassing withdrawal. Long term security from this threat rests on India's ability to promote effective governance in its neighboring states, whether this comes through active military involvement or diplomatic pressure will be determined by India's acceptance of the risks associated with each venture.

a. Defining the Threat

In Bangladesh, the threat is mostly ideological in that Bangladesh was East Pakistan which sponsored the idea of a "two-nation" theory in its partition from India in 1947.¹³¹ This theory rested upon the notion that Muslims and Hindus could not live together peacefully. While India has attempted to provide evidence that the theory is incorrect, it has been unable to convince most of its Muslim neighbors. Even when India participated in Bangladesh's efforts to gain independence from West Pakistan in 1971, little changed because the ruling elite in Bangladesh remained suspicious of Hindu domination. Currently, the threat has been viewed as more political in that Bangladesh has since independence maintained good relations with China and its undue influence could harm India.¹³² K.M. Panikkar pointed out the significance of this region which was once utilized to transport equipment for a war, though it flowed eastward.¹³³ India has retained this memory and fears Bangladesh could provide for a transit point in its invasion of the subcontinent.

In Burma, the threat is political in that Burma has historically been under the influence of China, though in the immediate post-independence period it shared good relations with India as well.¹³⁴ In the aftermath of India's 1962 war with China, Burma saw no reason to jeopardize its standing with China in order to maintain its nominal ties

¹³⁰ John H. Gill, "India and Pakistan: A Shift in the Military Calculus" in *Strategic Asia 2005-06: Military Modernization in an Era of Uncertainty*, Edited by Ashley Tellis and Michael Wills, National Bureau of Asian Research, 2005, 239.

¹³¹ Stephen P. Cohen, *India: Emerging Power*, Brookings Institution Press, 2001, 235.

¹³² John W. Garver, *Protracted Contest: Sino-Indian Rivalry in the 20th Century*, University of Washington Press, 2001, 299.

¹³³ K.M. Panikkar, *India and the Indian Ocean*, Unwin Brothers Limited, 1960, 81.

¹³⁴ P.M.S. Malik, "India and Burma/Myanmar Relations: From Idealism to Realism" at http://www.csh-delhi.com/publications/downloads/papers/from_idealism_to_realism.pdf (Accessed November 2006).

with India. Then, in 1988 with the takeover of the country by a military regime, India had little interest in dealing with the new regime. Both regimes have been incapable of providing security along its common border with India and this has been a significant area of concern for India. Their lack of effective governance has contributed to an insurgency along its common border with India and has resulted in Indian military responses. The current situation has changed somewhat. The insurgency continues along India's common border with Burma, but it has developed a more cooperative relationship in order to confront what India sees as a greater threat.¹³⁵ India has seen that China's influence in the region could jeopardize its security. India fears Burma presents the entry route for a Chinese invasion of the subcontinent. It is with this realization that India began its "Look East" policy, which led to an improvement in relations with Burma, no matter which regime held control. It is therefore committed to balancing Chinese political influence in Burma.

In Sri Lanka, the threat is more complex than the other small states. The threat is political insofar as Sri Lanka seeks a multi-polar South Asia, where it plays a more integral role.¹³⁶ At one time or another it has turned to different extra-regional partners to aid with its insurgency. India has sought to prevent outside interference and has made efforts to contribute to the Sinhalese efforts to regain control of its insurgency problem. India's aid is not so robust as to enable resolution of the issue because it also fears Sri Lanka for other reasons. The threat is also economic in that Sri Lanka poses a significant challenge to India's ability to dominate the Indian Ocean trade routes which contribute significantly to its economy.¹³⁷ Sri Lanka's location and magnificent harbor facilities make it a significant threat to India's maritime trade industry.¹³⁸ The threat is also ideological in that Sri Lanka is home to a Tamil population which seeks to create an autonomous Tamil state in north Sri Lanka, and this directly threatens the unity of India,

¹³⁵ Address by Indian Naval Chief of Staff Arun Prakash at the Reopening of the Andaman-Nicobar Command Ceremony August 2005, 6.

¹³⁶ Stephen P. Cohen, *India: Emerging Power*, Brookings Institution Press, 2001, 238.

¹³⁷ *Ibid.*, 237.

¹³⁸ John W. Garver, *Protracted Contest: Sino-Indian Rivalry in the 20th Century*, University of Washington Press, 2001, 300.

which has its own Tamil population in southern India.¹³⁹ These two Tamil populations are separated only by the small bay that separates India and the northern part of Sri Lanka. India fears that the creation of an autonomous Tamil state in Sri Lanka might embolden its resident population to seek greater autonomy. The Tamil threat also represents a military threat, since the Tamils have in the past attacked the Indian military.¹⁴⁰

In the Maldives, the threat is political in that India fears extra-regional influence could unnecessarily pose a danger to its security. It has therefore maintained good relations with the ruling elite, even coming to their aid in times of crisis. This has thus far bought India the political capital necessary to retain its influence in the Maldives. This influence is important because the Maldives's population is largely Muslim which contributes to the idea that India is capable of having good relations with Islamic countries, though it also contributes to the idea that India will be friendly so long as it can dominate.

b. Threat to India and Its Navy

For the most part, India's smaller neighbors do not possess naval capabilities. In some cases though, it is the lack of maritime capabilities that presents a threat. India has worked more closely with Sri Lanka and the Maldives to increase their maritime security effectiveness. The Sri Lankan government has been fighting an internal insurgency with the Tamils for the last several decades, which is a constant concern along India's southern peninsula.¹⁴¹ The Sea Tigers represent a small, but very effective force which is responsible for the sinking of over 30 Sri Lankan vessels. Jane's Intelligence estimates suggest that Sea Tiger strength is around 2,000 personnel, with an additional 100-200 personnel in the Black Sea Tigers.¹⁴² The former are tasked with conducting smuggling and piracy operations along the Sri Lankan coast. The latter are tasked with suicide attacks along the Sri Lankan coast. While the 2004 tsunami devastated the Sea Tigers, it has recently demonstrated its resurgent capabilities with an

¹³⁹ Stephen P. Cohen, *India: Emerging Power*, Brookings Institution Press, 2001, 239.

¹⁴⁰ Indian Ministry of Defense Report 2002, 36.

¹⁴¹ Stephen P. Cohen, *India: Emerging Power*, Brookings Institution Press, 2001, 237.

¹⁴² Iqbal Athas, "Battle Highlights Sea Tigers Capabilities", www.janes.com/defence/news/jdw/jdw060929_1_n.shtml (Accessed November 2006).

attack on MV Pearl Cruise II.¹⁴³ This presents a difficult task for India and its navy to balance its need to provide greater security to Sri Lanka without inciting its own Tamil population.

In the Maldives, its small Coast Guard is faced with the difficult task of patrolling its vast EEZ with only a few vessels. India has offered its support in order to maintain its good relations with its small neighbor, and in hope of preventing political subversion by extra-regional states such as China. The Chinese leased Marao Island in 1999 for maritime traffic management, but the island is also suspected of being used to monitor Indian and U.S. warships in the Indian Ocean.¹⁴⁴ The Indian navy went so far as to donate a ship to retain its influence because the Maldives, which “sits astride some crucial sea lanes in the Indian Ocean,” and is “the cynosure of several countries vying for a foothold in the region.”¹⁴⁵ This presents a difficult task for India and its navy to balance its security concerns without directly inciting Chinese opposition.

In Bangladesh and Burma, the threat to India and its navy is most evident in the lack of effective governance which has translated into a lack of control over its maritime space. This has created an area whereby terrorism, piracy and arms smuggling have increased.¹⁴⁶ This causes a need for increased patrol of the Bay of Bengal by the Indian navy.

3. Persian Gulf States

The security environment in South Asia has been significantly affected by events that occur in the Persian Gulf region and is therefore sensitive to its stability, or lack thereof. Stephen Philip Cohen emphasized that “no other region on India’s periphery has been as critical and as frustrating” to Indian diplomats.¹⁴⁷

a. Defining the Threat

¹⁴³ D.B.S. Jeyaraj, “Indian help sought to escort ‘Pearl Cruiser’ safely to KKS”, <http://transcurrents.com/tamiliana/archives/159> (Accessed November 2006).

¹⁴⁴ Vivek Ravuganshi, “India, Maldives Move Toward a Privileged Partnership”, www.defensenews.com/story.php?F=1717348&C=asiapac (Accessed November 2006).

¹⁴⁵ Sandeep Dikshit, “India Transfers Naval Ship to Maldives”, www.thehindu.com/2006/04/17/stories/2006041706371200.htm (Accessed November 2006).

¹⁴⁶ Government of India, 2006 Ministry of Defence Report, 9.

¹⁴⁷ Stephen P. Cohen, *India: Emerging Power*, Brookings Institution Press, 2001, 246.

This threat from the Persian Gulf region is political in that British-Indian influence was once the dominant power in the region. After the British departed, India had hoped to step into its position, but this situation was complicated by the Indian partition and the oil nationalization crisis in Iran. The Persian Gulf region is dominated by Muslims of either Arab or Persian origin. India's partition and its wars with a Muslim Pakistan have done little to aid in India's ability to gain influence in the region. In addition, the oil nationalization brought additional extra-regional actors into the Persian Gulf region. While the British and Russians had been engaged in the region since the early part of the 20th century, the United States entry was facilitated by the 1951 oil nationalization crisis in Iran.¹⁴⁸ The entry of the United States into Iran prevented India from assuming a more prominent role in the region and has since contributed to much of the instability associated with the region.

The threat from the Persian Gulf region is also economic in that India is heavily dependent upon this region as a trading partner.¹⁴⁹ India imports over 70 percent of its oil from this region. Continued access to this region and its oil is therefore a vital interest to India. India also has an estimated 3.5 million workers in the region, which provide valuable remittances and thereby requires New Delhi to consider its options in protecting its people and the flow of income.

b. Threat to India and Its Navy

The most significant threat to India and its navy in the Persian Gulf region comes from the Islamic Republic of Iran and its navy. While it is also possible to utilize Iran's air force to neutralize India's entry into the Persian Gulf region, it is assumed that India would deal with this contingency separately. Iran and India have shared good relations over the last several decades even involving India's aid to its nuclear program,¹⁵⁰ but India's increased relations with the United States may provide the impetus for change. According to a recent inquiry by an Indian expert, the Iranian navy consists of approximately one-third the number of personnel and roughly the same

¹⁴⁸ Ali M. Ansari, *Confronting Iran*, Basic Books, 2006, 33.

¹⁴⁹ John H. Gill, "India and Pakistan: A Shift in the Military Calculus" in *Strategic Asia 2005-06: Military Modernization in an Era of Uncertainty*, Edited by Ashley Tellis and Michael Wills, National Bureau of Asian Research, 2005, 240.

¹⁵⁰ Sharon Squassoni, "India and Iran: WMD Proliferation Activities" for Congressional Research Service, November 8, 2006.

number of naval combat ships, though Iran's navy consists of more small patrol boats than larger combatants.¹⁵¹ The Iranian navy has suffered from years of sanctions and lack of funding from the Islamic regime. Of the services, it has probably been the hardest hit by the 1979 Islamic Revolution. It had previously shared good relations with the United States Navy and was dependent upon them for the acquisition of its ships. Thereafter, Iran was isolated and has until recently been unable to assert its power in the Gulf Region. Only the aid of China and the Soviet Union has enabled Iran to develop a more capable naval arm. While the quantitative difference is not significant, the qualitative difference between these two navies is extremely significant.

Iran's surface fleet is a modest and ineffective force when solely considering its major surface combatants, but when considering its enormous small boat fleet, it presents a significant threat to even the most advanced navies, should they approach the Iranian coast. Its major surface combatants include only three Alvand-class and two PF-103 frigates, but it is supported by over 30 missile boats and 250 plus patrol boats. Iran has introduced a swarming tactic into its maritime strategy because of its meager assets, but this has proven effective in the Persian Gulf region because its waters are not easily navigable, especially through the Strait of Hormuz. In addition it has acquired a significant number of effective surface to surface missiles and rocket propelled grenade launchers which enhance the effectiveness of the numerous small boats that Iran's navy possesses. Because of Iran's strategic decisions to pursue a small-boat force it is not capable of projecting a significant threat outside the Persian Gulf into the Arabian Sea.

Iran's submarine fleet has great potential to be a significant threat with three of the quietest submarines in the world and a few mini-submarines. The three Kilo-Class submarines were acquired in the early 1990's from Russia, but its navy has been unable to develop the proficiency to employ them effectively. Should Iran learn to operate the Kilo submarines properly, it could increase its capability vis-à-vis the Indian navy. The three mini-submarines were developed or acquired with the help of North

¹⁵¹ R.S.N. Singh, *Asian Strategic Military Perspective*, Observer Research Foundation, 2005, 72 and 101.

Korea and there are plans to build a few dozen in Iran.¹⁵² These submarines will probably be used for mine laying, but suicide missions are also possible given dire circumstances.

The Iranian navy also possesses a small but proficient naval aviation component. Of the six U.S. P-3's, maybe two to three remain operational.¹⁵³ These provide a maritime patrol capability throughout the Persian Gulf and the Arabian Sea. Iranian naval aviation also includes five combat aircraft and 19 armed helicopters.

In total, Iran's naval capabilities present a significant threat to India and its navy within the confines of the Persian Gulf, but are less of a threat in the Arabian Sea. Should a conflict occur, and India finds it necessary to operate in the Persian Gulf, it will require significant planning to immobilize Iran's navy and thereby reduce the threat in the Persian Gulf before it could conduct sustained operations.

4. Southeast Asian States

The security environment in South Asia is not independent of Southeast Asia. For geographical reasons, India has found that this region is important to its national security for two reasons. First, it is important to India's national security because during the last half century this region has been most turbulent due to extra-regional actors, which is something that India has been attempting to limit. In order for India to be considered a "great power" it believes that it must provide the image of a nation in control of its security environment. The attempts by extra-regional actors to get involved limit India's credibility and thereby diminish its "great power" status. For that reason, India has explored different avenues to cultivate its relationship with the countries of Southeast Asia to both improve the security environment and prevent extra-regional involvement. The second reason it is important to India's national security is because this region provides the most efficient route between two emerging powers, China and India. China has committed to increasing its relations in the region in order to provide increased access. India, in recognition of this fact, was forced to counter with its own attempts to deny Chinese access to the region.

¹⁵²"Iranian Mini-Submarines", <http://www.strategypage.com/htm/htsub/articles/20051212.aspx> (Accessed November 2006).

¹⁵³ "Iranian Navy", <http://www.globalsecurity.org/military/world/iran/navy.htm> (Accessed November 2006).

a. Defining the Threat

The threat to India and its navy from Southeast Asia is political in that Southeast Asia and specifically, the Strait of Malacca, is the most prevalent area in the world for maritime piracy. A coalition of international users, to include the United States, Japan, China, and South Korea - has been more assertive in ensuring the security of this region in recent times.¹⁵⁴ The Regional Maritime Security Initiative was advocated by this consortium to better provide security in the region.¹⁵⁵ The three countries responded to this issue by committing to provide increased security which has resulted in their commitment to building up their naval capabilities. India has found that it shares common interests with these countries in guaranteeing security of the vital shipping lanes and counterterrorism efforts with the countries of Southeast Asia.¹⁵⁶ The Indian Chief of Naval Staff found this to be an area where the Indian Navy could be best utilized “to build partnerships by offering assistance in areas where we have expertise and cooperate in areas of commonality.”¹⁵⁷ Many of these efforts have thus far been resisted because India is itself viewed as an extra-regional actor by Malaysia, Singapore and Indonesia.

The threat to India and its navy from Southeast Asia is also political in that there is a competition for influence in the region between China and India. Southeast Asia has historically been called Indo-China for good reason. It represents the overlap of those two great civilizations and contains the most efficient path to traverse by land between the two regions. From the Indian perspective, the subcontinent is bordered by expansive mountain ranges to the north and west which discourage invasion even with today’s advanced technologies. It is therefore important for India to maintain influence in Southeast Asia so long as there is a potential for conflict with China. India has

¹⁵⁴ Sam Bateman, “Straits Security: Not Straightforward” Asia Pacific Defence Reporter, February 2005.

¹⁵⁵ C.S. Kuppuswamy, “Straits of Malacca: Security Implications”, <http://www.saag.org/papers11/paper1033.html> (Accessed November 2006).

¹⁵⁶ John H. Gill, “India and Pakistan: A Shift in the Military Calculus” in *Strategic Asia 2005-06: Military Modernization in an Era of Uncertainty*, Edited by Ashley Tellis and Michael Wills, National Bureau of Asian Research, 2005, 241.

¹⁵⁷ Address by Indian Chief of Naval Staff Admiral Arun Prakash at the National Defence College, November 2005.

attempted to emphasize this relationship since the 1990's in order to contain Chinese influence in the region and thereby make China's entry into South Asia more difficult.

b. Threat to India and Its Navy

This region presents two distinct threats to India and its navy. The first is through the extra-regional involvement in response to the predominance of maritime piracy and terrorism. The second is through the competition for influence in the region between China and India. In order for India to ensure that extra-regional involvement is minimized, the region must become more secure, which presents two paths. The first path, which requires less aid from India, involves the countries from within the region providing better security, which appears to be the preferred path for them. The second path, which requires a more assertive effort by India, is for India to take responsibility of the strait's security on its own, which as thus far been resisted by the Malaysia and Singapore. In order to make the decision easier for India, this region has recently undergone a significant expansion of its naval capabilities to provide better security.¹⁵⁸



Figure 2. Malacca Strait Security Areas. (From: <http://www.jinsa.org/documents/200507/3055.jpg>)

¹⁵⁸ Sheldon W. Simon, "Southeast Asia's Defense Needs: Change or Continuity?" in *Strategic Asia 2005-06: Military Modernization in an Era of Uncertainty*, Edited by Ashley Tellis and Michael Wills, National Bureau of Asian Research, 2005, 277.

Singapore has the most robust military capabilities in the vicinity of the strait, but is responsible for only a small portion of the strait's security. (See Figure 2) According to an inquiry by RSN Singh, Singapore's navy with 9,000 personnel, is roughly one-sixth the size of the Indian navy and with 23 ships, is roughly one-third the size of the Indian navy.¹⁵⁹ Its overall defense budget represents about 5-6 percent, which has been relatively constant despite the Asian Financial crisis and the SARS threat.¹⁶⁰ The Royal Singapore Navy's (RSN) surface fleet is fairly robust considering its small size. It is composed of six corvettes, six gunboats, four tank landing ships, and four mine warfare ships. This force has proven capable of patrolling Singapore's section of the strait, but many of the ships are aging and so Singapore has committed to acquiring replacements over the next decade. It has signed contracts with the French to acquire six Lafayette-class frigates, which will significantly enhance the overall capabilities of the Singapore navy. The RSN submarine fleet is also fairly robust considering Singapore's small size. It is composed of four Challenger-class diesel submarines which have been modified for operations in tropical waters.¹⁶¹ The RSN has ordered to more Vastergotland-class diesel submarines to further bolster its fleet.

Malaysia contains a fairly small navy in relation to its sizeable maritime claims and perceived threats. The Royal Malaysian Navy's (RMN) is responsible for most of the eastern section of the strait security issue. (See Figure 2) According to an inquiry by RSN Singh, Malaysia's navy with 14,300 personnel, is roughly one-fourth the size of the Indian navy and with 53 naval combat ships, is roughly 72 percent the size of the Indian navy.¹⁶² Its overall defense budget represents only one percent of GDP. This has not afforded it the funds necessary to acquire or develop a navy to provide adequate security to its area of responsibility. The RMN's surface fleet is composed of five frigates, six corvettes, six patrol vessels, eight missile boats, 27 small patrol craft and one amphibious vessel. This is not a significant force given that it is responsible for most of

¹⁵⁹ R.S.N. Singh, *Asian Strategic Military Perspective*, Observer Research Foundation, 2005, 268.

¹⁶⁰ Ibid., 275.

¹⁶¹ "Factsheet- Submarine Tropicalisation Programme", www.mindef.gov.sg/imindef/news_and_events/nr/2001/may/23may01_nr/23may01_fs2.html (Accessed November 2006).

¹⁶² R.S.N. Singh, *Asian Strategic Military Perspective*, Observer Research Foundation, 2005, 180.

the eastern section of the Malacca strait.¹⁶³ The RMN's submarine fleet has yet to take shape. Malaysia is set to acquire three new submarines from France by 2010, but these will take time to become operational and will probably not significantly contribute to the strait security issue. The RMN's aviation fleet consists of 6 Wasp HAS-1 helicopters which have the potential to make a significant contribution to strait security if properly utilized. In addition, Malaysia recently contracted to buy 12 more helicopters to bolster its overall capabilities and may provide increased security.

Indonesia contains a fairly sizeable navy, but again is hindered by the extent of its maritime claims and its perceived threat environment, which dictates that its armed forces concentrate on internal security. The Indonesian navy, or Tentara Nasional Indonesia - Angkatan Laut (TNI-AL), is responsible for the western section of the strait security issue, but has not been very effective as Indonesia remains the area of highest incidence for maritime piracy.¹⁶⁴

According to a current study by Cordesman and Kleiber, the TNI-AL contains 44,000 personnel, or roughly 80 percent the size of the Indian navy and has 65 major combat ships, or roughly 90 percent the size of the Indian navy.¹⁶⁵ According to the *CIA World Fact Book*, its overall defense budget is approximately three percent of GDP and has thus far proven quite insufficient to acquire or develop a navy to provide adequate security to its large area of responsibility, though this may be due to the level of corruption in government.¹⁶⁶ The TNI-AL's surface fleet is composed of 13 frigates, 16 corvettes, four missile patrol boats, 19 small patrol boats, 11 mine warfare craft and over 90 amphibious vessels.¹⁶⁷ Though this force is fairly sizeable, it is divided into two geographic commands and the Malacca Strait issue has not historically been a priority,

¹⁶³ Ibid., 185.

¹⁶⁴ International Maritime Bureau's Annual Piracy Report for 2005.

¹⁶⁵ Figures for personnel and naval combat ships were extracted from Anthony H. Cordesman and Martin Kleiber, *The Asian Conventional Military Balance in 2006*, The Center for Strategic and International Studies, June 2006, 26 and 46. The number of naval combat ships is utilized because it represents the total number in active service, but in terms of major combat ships depicted on page 32, the PLA Navy is just under two times the size of the Indian navy.

¹⁶⁶ *CIA World Factbook*, <https://www.cia.gov/cia/publications/factbook/geos/id.html> (Accessed November 2006).

¹⁶⁷ In calculating the major combat ships, the amphibious vessels were omitted due to their civilian classification by most studies.

though this has recently changed due to international pressure. The TNI-AL is responsible for most of the western section of the Malacca strait's security and yet its navy is spread thinly through this region due to this problem's ranking in relation to Indonesia's other perceived threats.¹⁶⁸ In its effort to modernize, the TNI-AL has contracted to buy four Sigma-class corvettes which are scheduled to be delivered between 2007-2009.¹⁶⁹ The TNI-AL submarine fleet is composed of two Type-209 diesel submarines. The TNI-AL has contracted to buy two more in the next few years, but these will take time to become operational and will probably not significantly contribute to the strait security issue. The TNI-AL's aviation fleet consists of 6 CN-235 maritime patrol aircraft which have the potential to make a significant contribution to strait security, but are currently utilized in the Jakarta region and therefore provide no added capability.¹⁷⁰

In total, the recent naval arms buildup by Singapore, Malaysia and Indonesia has the potential to increase the security in the Malacca strait and thereby prevent extra-regional involvement, but only if there is a concerted effort within each country to accord priority to this issue. The Indian navy has offered to aid in training and cooperation, but the offer has been resisted since the Indians are viewed in much the same way as other extra-regional actors. While this does not contribute to India's ability to secure its periphery, it does contribute to its attempts to limit Chinese influence in the region.

5. China

While Pakistan competes with India for power in South Asia, it does not share a maritime boundary in South Asia primarily serves as a competitor in greater Asia. India and China represent two of the most durable civilizations yet produced by humanity. Both were reshaped following World War II and both have emerged as economic and political giants in their respective spheres. The most significant issue between these two nations is an outstanding disagreement over a border region in the highlands of Himalayas which provides the strategic access points between these two great nations. A war was fought in 1962 and the humiliation in that war has been difficult to put aside for

¹⁶⁸ R.S.N. Singh, *Asian Strategic Military Perspective*, Observer Research Foundation, 2005, 87.

¹⁶⁹ "Sigma Corvette – TNI-AL", <http://www.scheldeshipbuilding.com/sigmacorvette.htm> (Accessed November 2006).

¹⁷⁰ "Indonesian Air Arms Overview", <http://www.scramble.nl/id.htm> (Accessed November 2006).

the Indians. China has also serves as the primary supporter of India's chief antagonist, Pakistan, in the development of nuclear weapons and this could also explain a certain amount of animosity between India and China. Long term security and stability in Asia is only feasible through more cooperation than conflict between these two great powers.

a. Defining the Threat

The threat from China is most easily defined as historical and political in character. Much of the conflict and competition between these two countries arises out of these two categories. The threat from China is historical in that, both these countries were great civilizations that emerged from lengthy phases of colonial domination around the same period and being both young and vulnerable nations, they perceived each other as the greatest threats because of their history as great civilizations. China was the first to make a move in the 1950's, conquering the Tibetan region which had historic ties to India and thereafter provided for a common border, which thereby increased the potential for conflict. That conflict came in 1962 with the Indian defeat serving to humiliate a generation of India and has left an indelible mark on the Indian psyche. This has not been easily discarded by Indian leaders of today, especially given the military modernization of China.

The threat from China is also political in that, competition for political dominance in Asia exists between these two countries. For that reason, India and China have embarked upon a strategic competition for influence in Asia which has resulted in many of the security problems in Asia. This theory best explains China's attempts to contain India in South Asia by aiding Pakistan as well as its movement to influence events in South East Asia, which has contributed to the Indian perception of 'strategic encirclement' by China.¹⁷¹ The end result is a classical security dilemma in which moves by either side are determined to be inimical to the other. This security dilemma has contributed to speculation by some analysts of an inevitable conflict between India and

¹⁷¹ John W. Garver, *Protracted Contest: Sino-Indian Rivalry in the 20th Century*, University of Washington Press, 2001, 5.

China.¹⁷² This issue is addressed in India's 2004 Maritime Doctrine where it asserts that "a certain threshold of capability is therefore required, which will make the cost of intervention sufficiently high" and therefore discourage China's extra-regional involvement.¹⁷³ India is therefore resigned to resist Chinese influence in the IOR which has increased recently. Two particular areas of interest are along Pakistan's Makran Coast in the Northern Arabian Sea and a few island territories throughout the IOR.¹⁷⁴

b. Threat to India and Its Navy

For the purpose of assessing the threat to India and its navy posed by China, it is necessary to examine its respective naval capabilities. According to Cordesman and Kleiber, the People Liberation Army Navy (PLAN) is the third largest in the world, behind the Soviet Union and the United States. It is roughly five times the size of the Indian navy in terms of personnel and almost two times the size of the Indian navy in terms of major combat ships.¹⁷⁵ China possesses both a quantitative and qualitative advantage over the Indian navy, but is also plagued by a distinct disadvantage in geography in the Indian Ocean Region (IOR). China's only direct access into the region is through the Malacca strait or via the southern Indonesian straits of Sunda or Lombok. The first route has been fortified by the Indian navy's development of the Andaman Nicobar Command which sits overlooking the mouth of the Strait of Malacca in the Bay of Bengal. The second route is much more distant but offers an access that is not immediately secured by the Indian navy. In either case, the distance required to engage the Indian navy significantly alters the quantity and quality of combatants that the PLA Navy would be capable of utilizing, and thereby, provides for a more balanced equation in a naval conflict in the IOR. One particular reason the PLA Navy has been able to grow so extensively is that it receives roughly 24 percent of the defense budget in relation

¹⁷² Both Steven A. Hoffman and Peter Lavoy have written pieces which suggest a future conflict between India and China would arise out of a more assertive China or an incident which lies in an area of strategic importance to both countries and escalates out of control. See Steven A. Hoffman, "Perception and China Policy in India" in *The India-China Relationship- What the United States Needs to Know*, Edited by Francine Frankel and Harry Harding, Asia Society, 2004, 40. and Peter Lavoy, "A Scenario for Sino-Indian Conflict" Unpublished Paper.

¹⁷³ 2004 Indian Maritime Doctrine, 60-61.

¹⁷⁴ Specific areas of these island territories include along the Myanmar Coast and in the Maldives.

¹⁷⁵ Figures for personnel and naval combat ships were extracted from Anthony H. Cordesman and Martin Kleiber, *The Asian Conventional Military Balance in 2006*, The Center for Strategic and International Studies, June 2006, 32.

to the Indian navy's 12 percent, plus China's defense budget is twice the size of the Indian's. In addition it is suspected that China's actual defense expenditures may even be in excess of those that are released. As a result, the PLA Navy has been provided with more funds to develop its maritime capabilities than that of the Indian navy.

The PLA Navy is an effective coastal defense force that is attempting to transition to a blue-water "active offshore defense" force.¹⁷⁶ Its surface fleet, much like Pakistan's, is mostly comprised of aging ships, 20-30 years old, which have been modified and upgraded over time.¹⁷⁷ In total it represents more than 900 naval combat ships.¹⁷⁸ The PLA Navy does contain a few surface ships that are of newer design and represent a significant threat to the Indian navy. It acquired two Russian Sovremennyy-class guided missile destroyers in 2000-01 which are fitted with one of the most lethal sea-skimming anti-ship cruise missiles in the world, the SS-N-22 "Sunburn". In addition, China's investment in a shipbuilding industry has recently paid dividends by producing several types of destroyers that are publicized as China's "Aegis equivalent."¹⁷⁹ The trouble for the PLA Navy's surface forces would be gaining access to the Indian Ocean and then providing support while they operate there.

The PLA Navy's submarine arm is mostly composed of aging platforms as well; but they represent the full spectrum of submarine warfare with diesel and nuclear propulsion in addition to two ballistic missile submarines. China has also invested in the shipbuilding industry for submarines which has also paid dividends. They have indigenously produced three classes of submarines – the Song, Yuan and Jin - that will have increased capability over the ones in their current inventory and further increases the qualitative advantage that China possesses over the Indian navy. In total, the PLAN submarine force is estimated at 75 in relation to India's 19 submarines, but with an

¹⁷⁶ R.S.N. Singh, *Asian Strategic Military Perspective*, Observer Research Foundation, 2005, 45.

¹⁷⁷ David Shambaugh, "China's Military Modernization: Making Steady and Surprising Progress", in *Strategic Asia 2005-06: Military Modernization in an Era of Uncertainty*, Edited by Ashley Tellis and Michael Wills, National Bureau of Asian Research, 2005, 92.

¹⁷⁸ Again this number is based upon the total number of ships in active service to the military and mostly is comprised of the 300 plus amphibious ships and 500 plus patrol and mine warfare ships.

¹⁷⁹ David Shambaugh, "China's Military Modernization: Making Steady and Surprising Progress", in *Strategic Asia 2005-06: Military Modernization in an Era of Uncertainty*, Edited by Ashley Tellis and Michael Wills, National Bureau of Asian Research, 2005, 93.

increasingly higher number coming into service every year, they could soon be over 100.¹⁸⁰ Again, the trouble for the PLA Navy's submarine forces would be gaining access to the Indian Ocean and providing support while they there.

The PLA Navy does have a large naval air arm with over 400 aircraft, but consists of only 4 maritime patrol aircraft and 8 ASW helicopters.¹⁸¹ This capability does not provide a significant advantage relative to the Indian navy, unless China can arrange a more forward position, or the Indian navy conducts more routine operations in the Chinese EEZ. And while India has operated an aircraft carrier group since the early 1960's, China is still developing its first carrier. Fortunately, due to the Taiwan scenario it is faced with, the Chinese have developed a capability by land-based aircraft to conduct over water missions. This would again require forward basing options to support.

In total, the PLA navy has the potential to be a much superior naval force than India's, but it must overcome the constraints of access and distance to even engage in the IOR. The Indian navy has recognized these as potential weaknesses and has worked to make Chinese access even more difficult by rebuffing its attempts to establish forward bases in Burma, Bangladesh and Pakistan. The continued development of the PLA Navy as a power projection force into the Southeast Asian region increases the likelihood for conflict between India and China in the future.

6. United States

The security environment has been routinely degraded due to involvement by the United States. India blames the U.S. involvement in the region for the Soviet invasion of Afghanistan, and for the subsequent spread of Islamic fundamentalism into South Asia. The United States, in the Cold War, did much to contain India's rise as it was viewed as one of the Soviet Union's client states. The United States did this through its aid to Pakistan, which utilized that aid to fight its proxy war. After the conclusion of the Cold War, the United States made attempts to dehyphenate its relations with India and Pakistan and thereby help India break free of its previous mold, but close relations with the United States were not immediately attractive to Indian politicians, since India's populace

¹⁸⁰ Anthony H. Cordesman and Martin Kleiber, *The Asian Conventional Military Balance in 2006*, The Center for Strategic and International Studies, June 2006, 46.

¹⁸¹ Anthony H. Cordesman and Martin Kleiber, *The Asian Conventional Military Balance in 2006*, The Center for Strategic and International Studies, June 2006, 26.

remained reticent to fully cooperate with the United States. This reticence has been slowly eroded and India and the United States are “turning a corner”¹⁸² with a long term goal of creating a strategic alliance through what is termed a “global partnership.”¹⁸³ As long as this relationship continues to develop along that path, the United States will become less of a challenge to India and more of an enabler. And this is something that would drastically alter India’s security environment.

a. *Defining the Threat*

The threat from the United States has been mostly political in nature, though at times it has taken an economic form. The United States viewed India as a Cold War antagonist and sponsored Pakistan to contain India politically.¹⁸⁴ Though this did also have some economic ramifications, India’s economic stagnancy has been more related to its internal economic policies, which have been slowly reformed to create a more open and expansive economy. India’s political containment by the United States ended with the Cold War, though its relations with the United States did not immediately change. In the aftermath of the nuclear demonstrations by India and Pakistan in 1998, the United States placed sanctions on both nations. The events of 9/11 removed much of the animosity that remained as India and the United States began to see that their national interests were starting to converge. This brings us to the current period, in which the United States has become less of a challenger and more of an enabler to India’s security environment.

b. *Threat to India and Its Navy*

The United States navy is the largest navy in the world according to gross tonnage.¹⁸⁵ In numerical terms, United States navy contains almost 350,000 personnel,

¹⁸² Teresita Schaffer, “India and United States: Turning a Corner,” in *South Asia Monitor*, Vol. 85, August 1, 2005.

¹⁸³ The term “partner” contains a different set of responsibilities than the term “ally” and has been found to be acceptable to the Indian polity. It is with this concept in mind that the “global partnership” is being pursued. Alan Kronstadt, “India-US Relations”, Congressional Research Service Report for Congress, 31 July, 2006.

¹⁸⁴ Baldev Raj Nayar and T.V. Paul, *India in the World Order: Searching for Major-Power Status*, Cambridge University Press, 2003, 66-67.

¹⁸⁵ Robert O. Work, “Winning the Race: A Naval Fleet Platform Architecture for Enduring Maritime Supremacy”. Center for Strategic and Budgetary Assessments Online at www.csbaonline.org/4Publications/Archive/B.20050301.AlterFleetStdy/B.20050301.AlterFleetStdy.pdf (Accessed November 2006).

which is roughly seven times the size of the Indian navy and 298 “battle force ships,”

which is almost three times the size of the Indian navy.¹⁸⁶ The United States navy possesses an overwhelming qualitative and quantitative advantage in almost every respect.

The United States navy’s surface force has seen no equal since World War II. Even the Soviet Union’s Navy paled in comparison. The United States surface navy is composed of 12 aircraft carriers, which provide the central focus of its ability to project power across the globe and perform a wide variety of missions. Each of the Carrier Strike Groups (CSG) consist of a carrier and its embarked air wing, one guided missile cruiser, two guided missile destroyers, an attack submarine and one resupply ship.¹⁸⁷ Its surface navy also contains an expeditionary element. The 12 amphibious assault ships provide the central focus of the Expeditionary Strike Group (ESG) which is composed of an amphibious assault ship and its embarked air wing, an amphibious transport dock ship, a dock landing ship, a guided missile cruiser, a guided missile destroyer, a frigate, and an attack submarine.¹⁸⁸ In combination, this provides the United States Navy a capability to perform a wide variety of operations in both the open ocean as well as the littoral environment.

The United States Navy’s submarine force is an extremely capable force as well. According to the US Navy’s homepage it contains 57 nuclear attack submarines, seven ballistic missile nuclear submarines, and four guided missile nuclear submarines. This force is capable of performing a wide variety of missions, from peacetime engagement, intelligence/surveillance/reconnaissance, special operations, precision strike sea denial or deterrence.¹⁸⁹

¹⁸⁶ The numbers for the study by Cordesman and Kleiber were not used in this comparison because they only involved the forces that the US Navy contains in Asia, or it’s Pacific Command, which do not reflect total force strength.

¹⁸⁷ “The Carrier Strike Group”, <http://www.navy.mil/navydata/ships/carriers/powerhouse/cvbg.asp> (Accessed November 2006).

¹⁸⁸ The makeup of this group is still under consideration, but this represents the current configuration. “The Expeditionary Strike Group”, http://www.navy.mil/navydata/navy_legacy.asp?id=147 (Accessed November 2006).

¹⁸⁹ “Submarine Force Multi-Mission Roles”, <http://www.navy.mil/navydata/cno/n87/today/mult-msn.html> (Accessed November 2006).

The United States Navy's aviation arm is a critical component of the navy's ability to conduct operations across the globe. It is composed of over 4000 operational aircraft that cover a wide variety of warfare disciplines.¹⁹⁰ This operational capability is one that separates medium power navies and global power navies which the Indian navy still aspires to become.

C. NON-TRADITIONAL THREATS

The non-traditional threat to India and its navy is contained in the manifestation of threats that are not representative of the dominant international system, but rather are a manifestation of sub-national entities. These threats represent three categories: terrorism, piracy, and smuggling. One additional category, natural disasters, is also significant because of their prevalence in South Asia and the extent of the damage that may occur with each incidence. All of these categories represent threats which require planned responses. These planned responses can become more efficient and effective with increased operational capabilities and experience.

1. Terrorism

In recognition of this emergent threat, the Indian defense leadership recently ordered the Indian navy to take a more proactive stance against terrorist activities in the Indian Ocean.¹⁹¹ India also set up a study group, led by B. Raman, to study the activities of international terrorist organizations in order to better define the threat to Indian national security. He recently presented a paper of the findings at a conference on National Security in a Changing Environment.¹⁹² In this paper, he helps define maritime terrorism acts in order to differentiate it from criminal maritime activities. It also identifies geographic areas of concern for India. While these threats are likely identified on the basis of the persistent conflict between India and certain elements that reside in its neighboring states, this report is specific and represents the most definitive view of the threat of maritime terrorism. In short, it identifies three areas of concern: Sri Lanka, Pakistan and Bangladesh. These areas are also identified in a U.S. report which suggests

¹⁹⁰ "Status of the Navy", http://www.navy.mil/navydata/navy_legacy.asp?id=146 (Accessed November 2006).

¹⁹¹ "Check Non-state Actors in the Indian Ocean: Pranab Tells Navy", <http://www.dnaindia.com/report.asp?NewsID=1058966> (Accessed November 2006).

¹⁹² B. Raman, "Maritime Terrorism: An Indian Perspective", South Asia Analysis Group, October 29, 2004.

that there is significant cooperation on this issue.¹⁹³ The Indian report also mentions the acts of terrorism along the Red Sea coast, but ties those acts to Al Qaeda, which they connect to Pakistan. The area of the Red Sea could be further expanded to include the Horn of Africa, which the United States regards as presenting a significant terrorist threat.¹⁹⁴ The Indian study concludes that the threat from maritime terrorism demands a unique set of skills to deal with a “larger gamut of issues” than are traditionally used to ensure maritime security. These issues include intelligence collection, analysis and assessment, physical security measures required to prevent maritime terrorism, crisis management to deal with successful attacks, a decision-making apparatus to deal with maritime terrorism, training syllabi and methods.

In addition to those threat areas identified by B. Raman’s study group, there are several other areas of interest to the Indian navy. These areas present significant challenges for the Indian navy because India does not currently play a significant role in the maritime security of these regions. The first area is the Malacca Strait, which connects India to Southeast Asia and the Pacific which holds enormous trade importance and if interrupted could devastate India’s economy. The second area is the Strait of Hormuz, which connects India to the Middle East which holds enormous energy supplies and could also devastate India’s economy if interrupted.

In order to effectively respond to the emergent threat of maritime terrorism to its homeland, the Indian navy must implement significant change in its organization. Most of its naval ports are shared with that of commercial ports which explains India’s recent movement of its major naval bases to more secure locations.¹⁹⁵ This measure will increase the security of its navy by making it more difficult to gain access to its ports.

In order to effectively respond to the threat of maritime terrorism in the Indian Ocean region, India will require greater coordination of regional states. This threat is not

¹⁹³ Alan Kronstadt, “Terrorism in South Asia” Congressional Research Service Report, 31 August, 2005.

¹⁹⁴ United States Institute of Peace, “Terrorism in the Horn of Africa”, <http://www.usip.org/pubs/specialreports/sr113.pdf> (Accessed November 2006).

¹⁹⁵ The main naval base on the west coast is being moved from Mumbai, which is not easily secured from civil maritime traffic, to Kadamba under project “Seabird” and a similar move is being planned on the east coast. Suda Ramachandran, “Indian navy drops another anchor”, http://www.atimes.com/atimes/South_Asia/HJ17Df02.html (Accessed November 2006).

one that will be defeated by a single country. One area where countries can improve coordination is through training exercises. Counter-terrorism training is reflected in the Indian navy's most recent exercises with the United States and will likely be included in its future exercises with regional countries as well.¹⁹⁶

2. Piracy

Piracy remains one of the chief threats to maritime security in the region for India and its navy.¹⁹⁷ According to the most recent International Maritime Organization report, the IOR remains the most prevalent area of piracy in the world with the Horn of Africa and Bangladesh being the emergent hotspots.¹⁹⁸ The Strait of Malacca and the Indonesian archipelago also remain areas of concern for piracy for the Indian navy. While the number of incidents along the Indian coast have been drastically reduced since reaching a ten-year high in 2003, this threat must be looked at from a regional perspective because of its ability to harm India's economic and political interests by portraying an insecure environment which is counter to India's rise to great power status. The Indian navy made attempts to deter maritime piracy in key areas outside its coastal region, especially in the post-9/11 period, but these were largely rebuffed by its littoral neighbors which view the Indian navy's patrolling as attempts by India to dominate the entire region. This resentment has decreased in the presence of increased pressure by other extra-regional actors such as Japan and the United States to increase security in the Malacca Strait. This came about as a result of a series of incidents in 2004 whereby two Japanese merchant ships were attacked. The United States and Japan both pressured the surrounding countries to increase security and this has led to a greater acceptance of Indian participation.¹⁹⁹

¹⁹⁶ The exercises slated for Malabar '06 includes sea control missions to prevent maritime terrorism and piracy. "Malabar – 06 Exercise Underway", <http://www.upi.com/SecurityTerrorism/view.php?StoryID=20061030-092755-1128r> (Accessed November 2006).

¹⁹⁷ Vijay Sakhuja, "Naval Diplomacy: Indian Initiatives", <http://www.bharat-rakshak.com/MONITOR/ISSUE6-1/Sakhuja.html> (Accessed November 2006).

¹⁹⁸ "Piracy and Armed Robbery against Ships Report for 1 January – 30 June 2006", by the ICC International Maritime Bureau, 5.

¹⁹⁹ Sandeep Dikshit, "Malacca Straits Security: Role seen for Indian Navy", <http://www.hindu.com/2004/09/08/stories/2004090806701200.htm> (Accessed November 2006).

There are certain capabilities which the Indian navy requires to effectively respond to the threat of piracy. First, it must have an ability to regularly patrol the regions of concern, whether by surface or air. The most important aspect is simply visibility. The presence of effective security patrols will ultimately diminish the number of incidents. This active presence is best achieved by deploying units to the region of concern. For the Malacca Strait, the Andaman Nicobar Command serves this purpose. The Indian navy is not as well positioned for combating piracy in the Horn of Africa region. It has conducted lengthy operations there for security reasons, but these cannot be sustained indefinitely without additional basing options in the areas of concern.

3. Smuggling



Figure 3. Major Maritime Smuggling Routes in South Asia (From: <http://en.wikipedia.org/wiki/Image:HeroinWorld.png>)

The 2002 Annual Defense Report highlights the smuggling of narcotics and small arms as threats to India's internal security environment. The areas for smuggling of these types of goods are most common along the Golden Crescent, which is located in the Gulf of Oman, and the Golden Triangle, which is located in the Bay of Bengal. (See Figure 3) The threat from narcotics is well known and universal. The threat from the proliferation of small arms is less well known, because its application is not universal. India suffers

from a series of persistent conflicts on its borders, and these weapons prolong that conflict by making their resistance more effective. Cutting off the supply of weapons would diminish the resistance. Another type of smuggling, which the United States has emphasized, while urging India to do likewise, is the smuggling of Weapons of Mass Destruction (WMD). The United States has identified North Korea, Iran and Syria as proliferators of WMD,²⁰⁰ so the most direct sea routes between these countries could be viewed as a start to greater definition of these areas of concern. India lies directly along the sea route between North Korea and Iran and could therefore provide valuable service to this endeavor should its leadership decide it lies within India's interests. Given the intensity of terrorist attacks in India as of late, and the North Korean history of aiding Pakistan, this decision has likely already been made. This is likely the reason for India's recent detainment of a North Korean merchant ship in its waters.²⁰¹

In order to counter the threat of smuggling the Indian navy requires extensive maritime surveillance capabilities to not only track vessels but also identify which are potentially smuggling illicit materials. This is especially difficult in the IOR because maritime traffic is so dense.

4. Natural Disasters

The destruction of the 2004 tsunami was considerable. The Indian navy's response was incredible, but as the Indian Defense Minister claims, it needs to improve its response because the IOR is so "prone to [natural] disasters."²⁰² In this region, one can almost set the clock by them. The four seasons arrive and depart in tandem with four major kinds of natural disasters: floods, earthquakes, cyclones, and droughts. In response to the 2004 tsunami, the Indian navy identified two critical requirements for an effective response.²⁰³ The first requirement is the need for efficient and effective operational and logistics planning processes. Crisis response must be orderly or else it only contributes to

²⁰⁰ "Bush Orders Sanctions against Weapons Proliferators", <http://usinfo.state.gov/eap/Archive/2005/Jun/30-463928.html> (Accessed November 2006).

²⁰¹ "North Korean Vessel Heading to Iran Detained in Indian Waters", <http://www.india-defence.com/print/2660> (Accessed November 2006).

²⁰² Address by Minister of Defense Pranab Mukherjee at the Carnegie Endowment for International Peace in Washington D.C. July 2005.

²⁰³ Address by Indian navy Chief Arun Prakash at the Andaman and Nicobar Islands Conference in August 2005.

the chaos of the already tense environment. The second requirement is the need for increased airlift and sea lift to enable more rapid response of the relief effort.

D. CONCLUSION

The overall threat to India and its navy has expanded in the current era. The Indian navy is tasked with countering a diverse set of traditional and non-traditional threats which require an increasingly complex set of capabilities. In order to counter its traditional threats, the Indian navy will require a blue-water force oriented toward sea control of the Indian Ocean. This will serve two purposes: first, it will demonstrate Indian power to prevent extra-regional intervention; and second, it will provide India with the necessary capabilities to respond to the wide spectrum of operations and crises that are required as the dominant maritime power in the IOR. In response to its non-traditional threats, the Indian navy must also become more oriented toward littoral operations, or a green-brown water navy. This will serve two purposes: first, it will provide India with an expeditionary capability to better conduct interdiction operations that are required in response to some of the non-traditional threats, and second, it will enable the Indian navy to better respond to emergent crises in times of natural disaster, when airlift and sealift serve as the primary enabler of effective response. Given the duality of its needs, the Indian navy of the future must be properly structured to respond to this diverse set of threats.

VI. UNLOCKING INDIAN MARITIME CAPABILITIES

A. INTRODUCTION

An important part of the formulation of strategy is the determination of one's capability to satisfy its purposes or to thwart the aims of others.²⁰⁴ This chapter serves to examine India's maritime capabilities in order to determine if its overall maritime capabilities are expanding. Maritime capabilities are defined for this study as India's overall naval capabilities, economic capabilities, industrial capabilities and technological capabilities. If India's strategic expansion is best explained by an expansion of its maritime capabilities, it will contribute to a strategy that can emphasize its strengths.

B. NAVAL CAPABILITIES

Naval capabilities are foundational to any maritime strategy. They include the proper organization and force structure of a navy to achieve the nation's objectives. While capability does guarantee success, miscalculating in this area almost guarantees failure.

1. Organization

According to Mahan, the quality and organization of a nation's ports represented one of the defining elements of the sea power of a nation. India has historically maintained two primary surface fleets, one on the east coast at Vishakapatnam and one on the west coast at Mumbai. The location of these bases coincided with major population centers and provided India with greater security from attacks on those areas. It did maintain several small bases along its coast to provide strategic depth, and to defend the Bay of Bengal and the Arabian Sea. In 1991, India expanded upon this idea to include a more forward defense of the Bay of Bengal through the establishment of the Andaman Nicobar Command, which took advantage of the islands strategic location in the eastern approaches to the Bay of Bengal. This new command enabled India to respond to emergent threats from an encroaching China and yet also enabled it to better provide security for the key choke point of that region, the Strait of Malacca. At that time, this strategic shift was not pursued in the Arabian Sea due to the absence of considerable threats as well as the absence of island territory in the Arabian Sea.

²⁰⁴ John M. Collins, *Grand Strategy: Practices and Principles*, Naval Institute Press, 1973, 9.

The Indian navy's basing organization for naval aviation is not as strategically placed, but it does possess adequate facilities to provide strategic depth. Its main naval aviation base, INS Hansa is at Goa, approximately 250 miles south of Mumbai, and houses the Sea Harrier squadrons that embark aboard its only operational aircraft carrier. This base is expected to be the home of the MIG-29's once India's newest carrier, INS Vikramaditya, becomes operational.²⁰⁵ There are seven additional naval aviation bases that serve the Eastern Fleet, Southern Fleet and Andaman and Nicobar Commands, but these mainly house helicopters at present. If India remains committed to a three carrier navy with one in each fleet, it may need to undergo a reorganization to facilitate the basing of aircraft carrier squadrons in each area.

In response to emergent threats, India's current organizational strategy is undergoing a transformation. In the aftermath of the series of terrorist attacks, India has sought to reduce the access to these maritime ports, while still maintaining their strategic locations. As a result, the Indian navy has sought to separate its civilian and military installations. It has therefore attempted to modify its basing arrangements at Mumbai and Vishakapatnam in addition to inducting a new base, INS Kadamba, at Karwar in the south of India. This will also create three commands whereby aircraft carrier basing is a possibility. In total, this will provide the Indian navy with improved strategic depth and security as well as adding a "very considerable flexibility in operations."²⁰⁶

2. Surface Fleet

The Indian navy's surface fleet is quantitatively superior to any other in the Indian Ocean totaling over 130 naval combat ships.²⁰⁷ This number represents both the combat and support aspect of the Indian fleet, and though many of these units are 20-30 years old, they remain effective because they have conducted considerable upgrades.²⁰⁸ The

²⁰⁵ "INS Hansa", <http://www.bharat-rakshak.com/NAVY/INS-Hansa.html> (Accessed November 2006).

²⁰⁶ Indian Navy Events 2005, "Reaching out to Maritime Neighbors", at <http://indiannavy.nic.in/events2005.pdf> (Accessed November 2006).

²⁰⁷ Figures for surface ships were extracted from Anthony H. Cordesman and Martin Kleiber, *The Asian Conventional Military Balance in 2006*, The Center for Strategic and International Studies, June 2006, 111. The number of naval combat ships is utilized because it represents the total number in active service.

²⁰⁸ Defence India's study of the Indian Navy, http://www.defenceindia.com/defenceind/indian_navy.html (Accessed November 2006).

Indian navy's new Chief of Naval Staff highlighted that the fleet will require additional units to be procured in the near future though as they are currently decommissioning more units than they are inducting.²⁰⁹

Of the 130 naval combat ships, only 113 are actually intended to conduct combat operations. Within that sub-group there are a select few that really possess the capability to project power. The Indian navy currently operates one aircraft carrier on its west coast, but has plans to operate up to three carriers in the future.²¹⁰ This operational plan will be more possible with the transformation of its organizational structure and the creation of the new base at Karwar. The former Russian Carrier Gorshkov, INS Vikramaditya, is likely to be commissioned by 2008 and will be based on the east coast initially.²¹¹ The completion of its first indigenous aircraft carrier is not expected until 2012.

The Indian navy currently operates two different classes of guide missile destroyers totaling eight units with a third class in the development and construction phase.²¹² The completion of the Kolkata-class destroyers would add three additional units by 2012 bringing the total number to 11 units. Of these units, the Delhi-class destroyers are the most capable, providing the Indian navy with a multi-mission capability. The Indian navy also operates three different classes of guided missile frigates totaling nine units with two more classes in the acquisition and construction phase.²¹³ The Talwar and Brahmaputra-class frigates both possess a multi-warfare capability with extremely advanced anti-ship cruise missiles. India signed a contract for Russia to provide three units of its newest modified Talwar class by 2012 which will

²⁰⁹ "Navy's Shrinking Submarine Fleet a Concern: Chief", <http://www.hindu.com/thehindu/holnus/001200611060314.htm> (Accessed November 2006).

²¹⁰ "India to Have 3-Carrier Navy", <http://deccanherald.com/deccanherald/nov152006/national2344220061114.asp> (Accessed November 2006).

²¹¹ Ibid.

²¹² Bharat Rakshak, "The Surface Fleet", <http://www.bharat-rakshak.com/NAVY/Surface.html> (Accessed November 2006).

²¹³ Ibid.

likely be armed with the Brahmos anti-ship cruise missile. The Shivalik-class guided missile frigate is the Indian navy's stealth frigate and will add an additional three units by 2008. The Indian navy also currently operates three different classes of guided missile corvettes totaling 20 units with one more class in the construction phase.²¹⁴

Of the 130 naval combat ships, 17 are intended for troop transport. These represent the expeditionary sea lift capability of the Indian navy, which was recently utilized in the aftermath of the 2004 tsunami as part of the relief operations. This event highlighted to the Indian leadership the significant role that amphibious forces could play and has served to also highlight the need to increase its overall capability to support operations of this sort in the IOR. The Indian navy has therefore committed to increasing its overall amphibious capability, which prompted the purchase of the American amphibious vessel Trenton. This acquisition will significantly enhance India's troop carrying capacity.²¹⁵ In addition, the Indian navy recently commissioned an indigenous amphibious unit built at the INS Shardul at the Garden Reach Shipbuilders and Engineers in Kolkata.²¹⁶ An additional two units of this same class are expected to be commissioned into the Indian navy by 2007. These units are capable of carrying up to 200 troops for a longer duration or 500 for short duration.

The Indian navy has proven itself capable in times of crisis, as shown during the 2004 tsunami, but the overall surface fleet will likely increase in size and complexity as India continues to pursue its blue-water navy, especially given its increased emphasis on indigenous production. As India becomes more self-sufficient it will not require as many foreign acquisitions, and this will inevitably be more cost-efficient as well.

3. Submarine Arm

The Indian navy's submarine fleet is of considerable size in relation to its Indian Ocean neighbors, but pales in comparison to the PLA Navy's submarine fleet. The Indian navy's submarine arm currently consists of three classes of diesel submarines

²¹⁴ Ibid.

²¹⁵ The Trenton, which can carry up to 900 troops and 24 amphibious assault vessels, almost doubles India's current troop carrier, the Magar, which can carry only 500 troops and 8 amphibious personnel carriers.

²¹⁶ "Navy Gets INS Shardul", <http://cities.expressindia.com/fullstory.php?newsid=209817> (Accessed November 2006).

totaling 16 units with an additional two classes of submarines in the development and acquisition phase.²¹⁷ Of those in service, the Kilo-class submarine is the most capable, being one of the quietest submarines in the world, and outfitted with advanced weapons, including the Klub-S anti-ship cruise missile and a shoulder-launched surface to air missile.²¹⁸ India has contracted for six French Scorpene-class submarines, with the first arriving in 2012. It is also constructing its first nuclear submarine and though slow in its development, it is scheduled to complete five units by 2020. These units will add a new dimension for the Indian navy and could be a significant factor in India's overall nuclear strategy.²¹⁹ The new Navy Chief, Admiral Mehta, has mentioned the aging fleet as a concern, which may signal that it will increase its funding for additional acquisitions to forestall a significant drop in the overall force numbers.²²⁰

4. Naval Air Arm

The Indian navy's aviation arm is also of considerable size in relation to its Indian Ocean neighbors, but is vastly outnumbered by the PLA Navy's aviation arm. The Indian navy's aviation arm consists of more than 125 helicopters and fixed wing aircraft.²²¹ The Indian navy's fighter force is fairly lean with 15 Sea Harriers and an additional 5 dual-seat Sea Harrier trainers. The Indian navy recently purchased 16 MIG-29K advanced fighter aircraft to be utilized aboard the INS Vikramaditya which will significantly enhance the qualitative capabilities of the Indian navy's fighter component.²²² These are expected to be delivered by 2008. The Indian navy's helicopter wing is fairly robust, totaling more than 91 units which conduct a variety of missions to include search and rescue, maritime patrol and anti-submarine warfare. An additional six Sea-King

²¹⁷ Bharat Rakshak, "The Submarine Arm", <http://www.bharat-rakshak.com/NAVY/Submarine.html> (Accessed November 2006).

²¹⁸ Bharat Rakshak, "The Sindhugosh {Kilo} Class", <http://www.bharat-rakshak.com/NAVY/Sindhugosh.html> (Accessed November 2006).

²¹⁹ A signal of the Indian navy's increasing role in its strategic forces occurred when a navy officer was selected to take command of India's Strategic Forces Command in December 2006. <http://us.rediff.com/news/2006/nov/11navy.htm> (Accessed November 2006).

²²⁰ "The Navy's Shrinking Submarine Fleet a Concern: Chief", <http://www.hindu.com/thehindu/holnus/001200611060314.htm> (Accessed November 2006).

²²¹ Figures for aircraft were extracted from Anthony H. Cordesman and Martin Kleiber, *The Asian Conventional Military Balance in 2006*, The Center for Strategic and International Studies, June 2006, 106.

²²² Bharat Rakshak, "MIG-29K/KUB", <http://www.bharat-rakshak.com/NAVY/MiG-29K.html> (Accessed November 2006).

helicopters were included in the purchase of the USS Trenton and will further enhance India's capabilities.²²³ The Indian navy also possesses 20 maritime patrol aircraft, but most are obsolete and in need of upgrade or replacement. The Indian navy held a competition in April 2006 in hopes of acquiring an additional 30 aircraft by 2020.²²⁴ The acquisition of up to 30 aircraft with advanced capabilities could bolster its maritime surveillance capabilities and reduce the need for surface patrols in its EEZ. The Indian navy appears committed to the expansion and indigenization of its naval aviation wing which will provide it with increased coverage of the Indian Ocean and could significantly alter its maritime strategy.

C. ECONOMIC CAPABILITIES

The Indian navy budget allocation has historically been the least of the three armed services due to the perceived threat from the sea and the service's overall size in relation to the other armed services. Its budget traditionally hovered between 11-13 percent throughout the 1980's and 1990's, but it has since increased to 17.6 percent with an aim point of 20 percent.²²⁵ The growth in the annual expenditure is important given the navy's ambitious plans for expansion and indigenization.²²⁶ The overall growth in the Indian economy also provides a significant growth in the Indian navy's budget. If this economic growth can be sustained, the Indian navy will be much more capable of pursuing aggressive acquisition and development programs and thereby increase its overall naval capabilities.

D. INDIGENOUS PRODUCTION CAPABILITIES

The Indian navy has never been capable of producing the equipment necessary to sustain itself and has therefore been heavily reliant upon foreign acquisitions. India's indigenous production capabilities have been a national interest since its independence,

²²³ "Navy to Induct American Seaking Choppers", <http://www.india-defence.com/reports/2677> (Accessed November 2006).

²²⁴ "India's Navy Holding Maritime Patrol Aircraft Competition (Updated)", <http://www.defenseindustrydaily.com/2006/04/indias-navy-holding-maritime-patrol-aircraft-competition-updated/index.php> (Accessed November 2006).

²²⁵ Madhvendra Singh, "The Indian Navy in 2020", *Security Research Review*, Volume 2, Issue 2, 2006.

²²⁶ "Indian navy reveals ambitious expansion, indigenization programme", <http://www.india-defence.com/reports/2460> (Accessed November 2006).

but have historically been lackluster.²²⁷ Despite its failures, India has remained committed to this industry. In the aftermath of the 1990's economic crisis and the fall of India's leading defense supplier, India committed to become more self-reliant. This has been slow in coming, but appears to be paying dividends. The Indian Prime Minister and the new Navy Chief appear committed to improving its indigenous production capabilities.²²⁸ In an effort to overcome its past problems, the Indian navy has even set up a new directorate to ensure its success.²²⁹

India has seven primary shipyards which are responsible for the construction and repair of Indian navy ships.²³⁰ The shipyard Mazagon Dock Limited (MDL) of Mumbai is capable of constructing surface ships as well as submarines. MDL is currently constructing three Delhi-class destroyers, three Shivalik-class stealth frigates and will be responsible for the construction of six Scorpene-class submarines. Garden Reach Shipbuilders and Engineers (GRSE) of Kolkata is responsible for the construction of some of India's larger surface ships. GRSE is currently constructing three large Shardul-class landing ship tanks and four Project-28 anti-submarine warfare corvettes. Goa Shipyard Limited (GSL) of Mormugao is capable of constructing small patrol vessels, but has recently committed to the construction of next-generation vessels such as hovercraft and mine-countermeasure vessels.²³¹ GSL is currently constructing three offshore patrol vessels for the Indian navy. Cochin Shipyard is responsible for the construction and repair of India's carrier force. It is currently constructing the first indigenously produced aircraft carrier in India, the Air Defence Ship, as well as a dozen fast attack craft for the Indian navy. Hindustan Shipyard Limited (HSL) at Vishakapatnam is primarily

²²⁷ David Barstow, "Indian Defence Industry: Domestic Production and Imports the Future Balance", National Intelligence Council Report, November 15, 2001.

²²⁸ Arunkumar Bhatt, Modernize Shipyards: PM", <http://www.hindu.com/2006/05/07/stories/2006050704820800.htm> and "New Naval Chief Strong Supporter of Indigenous Systems", <http://deccanherald.com/deccanherald/sep32006/state194834200692.asp> (Accessed November 2006).

²²⁹ The Directorate for Indigenization was established in order to provide greater oversight. More information is available at <http://indiannavy.nic.in/doi.pdf> (Accessed November 2006).

²³⁰ India Defence Analysis, "Indian Shipyards – Full Orderbooks", <http://www.indiadefence.com/shipsrds.htm> (Accessed November 2006).

²³¹ Goa Shipyard Home Page, <http://www.goashipyard.co.in/html/introduction.htm> (Accessed November 2006).

responsible for repairs to India's submarine fleet, but also has a significantly diverse shipbuilding capability.²³² HSL is currently tasked with the midlife refit of India's Kilo-class submarines. India's two remaining shipyards, the ABG Shipyard Limited of Surat and Ratnagiri Shipyard Limited of Mumbai, are tasked with mostly the production of civilian bulk carriers and tugs, but have produced several small patrol craft and offshore patrol vessels in the past. In addition, INS Kadamba, the Indian navy's newest base at

Karwar, now has the capability to conduct ship repairs with a new dry-dock facility that can repair ships up to 10,000 tons and will alleviate some of the congestion of the other ship repair yards.

In total, India's indigenous production capability is undergoing reform to provide greater efficiency and increasing in size. It has been characterized as "one of the largest and most significant indigenous production capabilities in the developing world."²³³ This increased capability will undoubtedly benefit the Indian navy's ability to replace its aging fleet more efficiently and may also provide India with an export capacity that would further serve to bolster India's economic prowess.

E. TECHNOLOGIC CAPABILITIES

India is a country that has not historically been associated with the leaders of technology, but its IT sector is now booming. In much the same way, for most of the history of the Indian navy, its ships and weapons systems were not constructed through its own technologic prowess, but it has since developed itself into a multi-dimensional force with an equally impressive array of sensors and weaponry. This process began in 2001 when the Indian defense leadership, realizing the potential impact that technology can have on operations, actively called for greater improvement in this area.²³⁴ The Indian navy sought to break down its historical barriers to become a leading producer of naval technology. And while it remains a long way from being a leading producer, it is taking steps in the right direction. Its shipbuilding industry has acquired the capability to

²³² Thanks to its varied clientele, HSL is capable of building ships of many different classes. Hindustan Shipyard Limited Homepage, <http://www.hsl.nic.in/shipbld.htm> (Accessed November 2006).

²³³ David Barstow, "Indian Defence Industry: Domestic Production and Imports the Future Balance", National Intelligence Council Report, November 15, 2001, 1.

²³⁴ Indian Minister of Defence speech at the 11th Admiral R D Katari Memorial Lecture.

construct a wide array of surface ships, submarines and is currently attempting an aircraft carrier in an effort to join an elite club. While as many as nine countries are capable of operating a carrier, only a select few have proven capable of constructing these technological behemoths. In addition, India recently announced its ability to produce nuclear warships, though the decision to construct ships of this type has not been made yet.²³⁵ The Indian leadership also recognized the need for its surface ships, submarines and aircraft to be interconnected to be more effective in operations at war or peace. It has therefore committed to achieving “seamless connectivity and secure communication exchange.”²³⁶ The Indian navy is also committed to becoming more self-reliant in its weapons industry and their efforts have bore fruit. Its Brahmos missile is an extremely advanced weapon system and calls have been made for the Indian navy to corner the market with this missile which can be launched from surface ships, submarines, aircraft, or on land and can be utilized against targets at sea or on land.

In some areas the Indian navy has made progress in creating a more advanced naval force by developing the technological prowess and thereby enabling it to compete on the world markets, but it remains on the fringe in many other areas. In order for India to become more self-reliant and also become more competitive in the global arms industry, continued investment in this sector will be required. This is more possible now than it has been in the past, especially given India’s economic success, but its success will depend on its ability to master the remaining areas of the naval defense industry.

F. CONCLUSIONS

The Indian navy’s overall capabilities are certainly expanding in the current era. It has developed into a well-rounded maritime force capable of conducting a wide array of operations in a peacetime or wartime environment. Its organizational structure is becoming more effective and adding strategic depth in areas where it has found itself vulnerable. The surface, submarine and naval aviation arms, though aging, remain qualitatively and quantitatively superior to any other in the IOR. India has committed to upgrading its aging naval units which will provide greater longevity while it has

²³⁵ “Navy Capable of Making Nuclear Powered Warships: Officials”, <http://www.bharat-rakshak.com/NEWS/newsrf.php?newsid=7694> (Accessed November 2006).

²³⁶ Government of India, 2006 Ministry of Defence Annual Report, 41.

committed to the acquisition and development of new naval forces and weapons systems. Its commitment to self-reliance has seen a new surge and this could provide India with the long term ability to remain qualitatively and quantitatively superior to its Indian Ocean neighbors. It is important to highlight that the Indian navy does not possess a qualitative or quantitative advantage over the Chinese navy and this will weigh heavily on its strategy. The Indian navy's shortcomings were highlighted during the 2004 tsunami with its lack of a robust sea-lift capability. It will also require a significant commitment to developing its technologic capabilities to achieve greater interconnectedness within its naval forces. In order to overcome these deficiencies, India will seek to leverage its economic success to achieve greater self-reliance in indigenous production and technology. India's rise to become a great power is not assured but its commitment to these areas will go a long way to helping it achieve its objectives.

VII. UNLOCKING INDIAN MARITIME STRATEGY

The continued development of the Indian navy's maritime strategy toward greater ambition and capability appears certain in line with the continued expansion of its interests, threats and force structure. The periods of greatest expansion occurred during eras in which all three variables simultaneously expanded. This occurred during two eras – the era of military buildup and the era of economic liberalization. It was in these periods that the Indian navy and its maritime strategy underwent its most significant change. These two periods were followed by a period of reduced growth. In the current era, the international system, and the United States in particular, appear to have embraced India's rise. India has finally become a contender for major power status in the international community in an economic, political and military sense. This has initiated a significant expansion of all three of the elements of Indian maritime strategy and will almost certainly lead to maritime expansion.

India's national interests have expanded as it assumes its role as a rising power. Its survival interests remain largely the same, with China and Pakistan as the chief threats to its survival, but it has also come to recognize that the unity of its population is extremely important, especially given the predominance of ethnic and religious conflict in South Asia. It therefore takes attempts to divide India's population much more seriously than it has in the past. India's vital interests and major interests are undergoing a period of rapid expansion primarily due to the coincidental expansion of its perceived area of influence. This has fundamentally changed its outlook and could foreshadow increased sensitivity to extra-regional involvement along its strategic periphery.

India's perceived threats have also expanded in the current period. While the traditional threat from China and Pakistan remain a concern, the non-traditional threat has assumed greater importance than it has in the past. The need for India to respond this threat is becoming more apparent and yet it has not been able to identify the best means to respond to that threat. India remains committed to maintaining This again presages Indian sensitivity, but may not necessarily be restricted to India's periphery.

India's naval capabilities are also expanding in the current period which enables it to provide a greater contribution to its national interests. Its navy has become the fifth largest navy in the world and may seek to play a more proactive role in regional security. While its naval capabilities have expanded, it remains vulnerable in many places. In particular its aging fleet will require a plan to maintain its current strength or risk the chance that an extra-regional actor will once again seek to gain influence in the region.

India's maritime strategy will clearly result in expansive development of its navy for the foreseeable future. Its current maritime strategy will not be accomplished for another 10-15 years, in which time India will be certainly faced with new challenges and circumstances. Barring a war against a major power, India appears capable of securing its national interests and responding to its traditional threats through its blue-water strategy. This strategy will also give it the needed legitimacy of a rising power. Where the blue-water strategy falls short is in response to the non-traditional threats it faces. This challenge will require a significant brown or green water capability. India will ultimately need to commit greater resources to provide a multi-dimensional force capable of responding to the diverse threat categories presented in the Indian Ocean Region.

LIST OF REFERENCES

Books

1. Ansari, Ali, *Confronting Iran*, Basic Books, 2006.
2. Nayar, Baldev and T.V. Paul, *India in the World Order*, Cambridge University Press, 2003.
3. Bright, Jagat S., *Important Speeches of Jawaharlal Nehru*, Indian Printing Works, 1951.
4. Cohen, Stephen P., *India: Emerging Power*, Brookings Institution Press, 2001.
5. Collins, John M., *Grand Strategy: Practices and Principles*, Naval Institute Press, 1973.
6. Cordesman, Anthony H. and Martin Kleiber, *The Asian Conventional Military Balance in 2006*, The Center for Strategic and International Studies, June 2006.
7. Dossani, Rafiq and Henry S. Rowen, Editors, *Prospects for Peace in South Asia*, Stanford University Press, 2005.
8. Garver, John W., *Protracted Contest: Sino-Indian Rivalry in the 20th Century*, University of Washington Press, 2001.
9. Harrison, Selig and K. Subrahmanyam, *Superpower Rivalry in the Indian Ocean*, Oxford University Press, 1989.
10. Hiranandani, G.M., *Transition to Triumph*, Lancer, 2000.
11. Hiranandani, G.M., *Transition to Eminence*, Lancer, 2005.
12. Kavic, Lorne, *India's Quest for Security: Defense Policies, 1947-1965*, University of California Press, 1967.
13. Khan, Fazal Muqem, *The Story of the Pakistan Navy 1947-1972: Pakistan's Crisis in Leadership*, National Book Foundation, 1973.
14. Koithara, Verghese, *Society, State and Security: The Indian Experience*, Sage Publications, 1999.
15. Mansingh, Surjit, *India's Search for Power: Indira Gandhi's Foreign Policy 1966-1982*, Sage Publishers, 1984.
16. Mohan, C. Raja, *Crossing the Rubicon: The Shaping of India's New Foreign Policy*, Palgrave Macmillan, 2004.
17. Naidu, G.V.C., *The Indian Navy and Southeast Asia*, Knowledge World Press, 2000. Tanham, George K., *Securing India*, Manohar Publishers, 1996.
18. Panikkar, K. M., *India and the Indian Ocean*, George Allen and Unwin Ltd, 1945.
19. Panikkar, K. M., *India and the Indian Ocean*, George Allen and Unwin Ltd, Second Impression 1962.

20. Panikkar, K. M., *Problems of Indian Defense*, Asia Publishing House, 1960.
21. Paul, T. V., *The India-Pakistan Conflict*, Cambridge University Press, 2005.
22. Roy-Chaudhury, Rahul, *Sea Power and Indian Security*, Brassey's, 1995.
23. Singh, Jaswant, *Defending India*, St. Martin's Press, 1999.
24. Singh, Satyindra, *Blueprint to Bluewater*, Lancer, 1992.
25. Singh, R.S.N., *Asian Strategic Military Perspective*, Observer Research Foundation, 2005.
26. Zientak, James, *China and India: The Struggle for Maritime Supremacy in the Asia-Pacific and Indian Ocean*, Naval Postgraduate School, 2000.
27. Ziring, Lawrence, *Pakistan at the Crosscurrent of History*, Oneworld Publications, 2003.

Chapters

1. Bartlett, Henry, Paul Holman, Jr., and Timothy E. Somes, "The Art of Strategy and Force Planning" in *Strategy and Force Planning*, 3rd Edition, edited by the Strategy and Force Planning Faculty, Naval War College, 2000.
2. Chadda, Maya, "International Dimensions of Ethnic Conflict," in *South Asia in World Politics*, Edited by Devin Hagerty, Rowman and Littlefield Publishers, 2005.
3. Rafiq Dossani and Henry S. Rowen, "Introduction" in *Prospects for Peace in South Asia*, Edited by Rafiq Dossani and Henry S. Rowen, Stanford University Press, 2005.
4. Gill, John H., "India and Pakistan: A Shift in the Military Calculus" in *Strategic Asia 2005-06: Military Modernization in an Era of Uncertainty*, Edited by Ashley Tellis and Michael Wills, National Bureau of Asian Research, 2005.
5. Hoffman, Steven A., "Perception and China Policy in India" in *The India-China Relationship- What the United States Needs to Know*, Edited by Francine Frankel and Harry Harding, Asia Society, 2004.
6. Shambaugh, David, "China's Military Modernization: Making Steady and Surprising Progress", in *Strategic Asia 2005-06: Military Modernization in an Era of Uncertainty*, Edited by Ashley Tellis and Michael Wills, National Bureau of Asian Research, 2005.
7. Simon, Sheldon, W., "Southeast Asia's Defense Needs: Change or Continuity?" in *Strategic Asia 2005-06: Military Modernization in an Era of Uncertainty*, Edited by Ashley Tellis and Michael Wills, National Bureau of Asian Research, 2005.

Papers/Journals/Reports

1. Barstow, David, "Indian Defence Industry: Domestic Production and Imports the Future Balance", National Intelligence Council Report, November 15, 2001.
2. Bateman, Sam, "Straits Security: Not Straightforward" in *Asia Pacific Defence Reporter*, February 2005.
3. Berlin, Donald L., "India in the Indian Ocean" in *Naval War College Review*, vol. 59, no.2, Spring 2006, 58-89.
4. Datta-Ray, Sunanda, "The Rajiv Doctrine: India as a Mini Superpower?" *The Statesman*, 13 November 1988.
5. Ganguly, Sumit, "India's Foreign Policy Grows Up," *World Policy Journal* Vol. 20 no. 4 (Winter 2003/4).
6. Ganguly, Sumit, "Will Kashmir Stop India's Rise?" *Foreign Affairs*, Vol. 85 no. 4 (2006), 45-56.
7. International Maritime Bureau 2005 Annual Piracy Report.
8. International Maritime Bureau "Piracy and Armed Robbery against Ships Report for 1 January – 30 June 2006."
9. Kanwal, Gurmeet, "India's National Security Strategy in a Nuclear Environment," in *Strategic Analysis* Vol. 24, No. 9, December 2000.
10. Kapila, Subhash, "Proliferation of Small Arms and its Impact on India."
11. Kronstadt, Alan, "India-US Relations", Congressional Research Service Report for Congress, 31 July, 2006.
12. Kronstadt, Alan, "Terrorism in South Asia" Congressional Research Service Report, 31 August, 2005.
13. Lavoy, Peter, "A Scenario for Sino-Indian Conflict" June 2006.
14. Levi, Michael, "US-India Nuclear Cooperation: A Strategy for Moving Ahead", Council on Foreign Relations Press, June 2006.
15. Mohan, C. Raja, "India and the Balance of Power" in *Foreign Affairs*, Volume 85, No.4, July/August 2006.
16. Pan, Esther, "US-India Nuclear Deal" Congressional Research Service Report for the Council on Foreign Relations, February 24, 2006.
17. Prakash, Arun, "Future Strategy and Challenges for the Indian Navy" in the *Royal United Services Institute for Defence and Security Studies Defence Systems*, Vol. 8, No.2, November 2005, 31-33.
18. Raman, B., "Maritime Terrorism: An Indian Perspective", South Asia Analysis Group, October 29, 2004.
19. Schaffer, Teresita, "India and United States: Turning a Corner," in *South Asia Monitor*, Volume 85, August 1, 2005.

20. Singh, Madhvendra, "The Indian Navy in 2020", *Security Research Review*, Volume 2, Issue 2, 2006.
21. Squassoni, Sharon, "India and Iran: WMD Proliferation Activities" for Congressional Research Service, November 8, 2006.
22. "Trends In Maritime Violence – July 1996: The Red Sea, the Gulf of Aden, the Persian Gulf and the Indian Ocean" at Jane's Information Group.
23. United States National Strategy for Maritime Security, September 2005.
24. Work, Robert O., "Winning the Race: A Naval Fleet Platform Architecture for Enduring Maritime Supremacy". Center for Strategic and Budgetary Assessments, 2005.

Speeches

1. Jawaharlal Nehru, speech on Asia to the Constituent Assembly, March 8, 1949.
2. Address by PM of India, Monmohan Singh, September 19, 2004 speech on his departure to address the UN General Assembly.
3. Address by PM of India, Monmohan Singh, March 18, 2006 Asian Corporate Conference Speech.
4. Address by PM of India, Monmohan Singh, April 18, 2006 Speech on the release of Jagat Mehta's book.
5. Address by PM of India, Monmohan Singh, July 12, 2006 Address to the Nation following the Mumbai bombings.
6. Address by PM of India, Monmohan Singh's July 26, 2006 Energy Conclave Speech.
7. Address by PM of India, Monmohan Singh, August 15, 2006 Independence Day speech.
8. Address by PM of India, Monmohan Singh, September 15, 2006 Speech at the XIV Non-Aligned Movement Summit in Havana, Cuba.
9. Address by Indian Defence Minister at the 11th Admiral R D Katari Memorial Lecture.
10. Address by Defense Minister, Pranab Mukherjee at the Carnegie Endowment for International Peace in Washington D.C. July 2005.
11. Address by Defence Minister, Pranab Mukherjee at the Fifth IISS Asia Security Summit in Singapore on 03 June 2006.
12. Address by Indian Navy Chief, Arun Prakash at the Andaman and Nicobar Islands Conference in August 2005.
13. Address by Indian Navy Chief, Arun Prakash at the National Defence College, November 2005.

Official Indian Reports

1. Government of India, 2000 Ministry of Defence Report.
2. Government of India, 2001 Ministry of Defence Report.
3. Government of India, 2002 Ministry of Defense Report.
4. Government of India's 10th Five Year Plan (2002-2007).
5. Indian 2003 Ministry of Defence Report.
6. 2003 Indian Navy Events.
7. Indian 2004 Ministry of Defence Report.
8. Government of India, May 2004 National Common Minimum Program.
9. 2004 Indian Maritime Doctrine.
10. 2004 Indian Navy Events.
11. Government of India, 2005 Ministry of Defence Report.
12. Government of India, 2005 Ministry of External Affairs Annual Report.
13. 2005 Indian Navy Events.
14. Government of India, 2006 Ministry of Defence Report.
15. 2006 Indian Navy Vision Document.

Websites

1. <http://www.acdis.uiuc.edu> (Accessed October 2006).
2. <http://www.atimes.com> (Accessed November 2006).
3. <http://www.bharat-rakshak.com> (Accessed November 2006)
4. <https://www.cia.gov> (Accessed August, 2006).
5. <http://www.csh-delhi.com/publications> (Accessed November 2006).
6. <http://www.dbresearch.com> (Accessed August 2006).
7. <http://www.deccanherald.com> (Accessed November 2006).
8. <http://www.defenceindia.com> (Accessed November 2006).
9. <http://www.defensenews.com> (Accessed November 2006).
10. <http://www.defenseindustrydaily.com> (Accessed September 2006).
11. <http://www.dnaindia.com> (Accessed November 2006).
12. <http://www.globalsecurity.org> (Accessed November 2006).
13. <http://www.goashipyards.co.in> (Accessed November 2006).

14. <http://www.hindu.com> (Accessed November 2006).
15. <http://www.hinduonnet.com> (Accessed September 2006).
16. <http://www.hsl.nic.in/shipbld.htm> (Accessed November 2006).
17. <http://www.india-defence.com> (Accessed November 2006).
18. <http://www.indiannavy.nic.in> (Accessed November 2006).
19. <http://www.iansa.org> (Accessed October 2006)
20. <http://www.iips.org> (Accessed July 2006).
21. <http://www.janes.com/defence/news> (Accessed November 2006).
22. <http://www.jinsa.org> (Accessed November 2006).
23. <http://www.mindef.gov.sg> (Accessed November 2006).
24. <http://www.navy.mil> (Accessed November 2006).
25. <http://www.paknavy.gov.pk> (Accessed October 2006).
26. <http://www.pakistanidefence.com/news> (Accessed October 2006).
27. <http://www.saag.org> (Accessed October 2006).
28. <http://www.scheldeshipbuilding.com> (Accessed November 2006).
29. <http://www.scramble.nl/id.htm> (Accessed November 2006).
30. <http://www.strategicstudiesinstitute.army.mil> (Accessed November 2006).
31. <http://www.strategypage.com> (Accessed November 2006).
32. <http://transcurrents.com> (Accessed November 2006).
33. <http://www.thehindu.com> (Accessed November 2006)
34. <http://www.upi.com> (Accessed November 2006).
35. <http://www.usip.org> (Accessed November 2006).
36. <http://www.usinfo.state.gov> (Accessed November 2006).

INITIAL DISTRIBUTION LIST

1. Defense Technical Information Center
Ft. Belvoir, Virginia
2. Dudley Knox Library
Naval Postgraduate School
Monterey, California
3. Prof. Daniel Moran
National Security Affairs, Naval Postgraduate School
Monterey, California
4. Prof. Surinder Rana
National Security Affairs, Naval Postgraduate School
Monterey, California
5. Rear Admiral Tony Cothron
Director of Naval Intelligence, CNO N2
Washington DC
6. Claudia Erland
Deputy Director of Naval Intelligence
Washington DC
7. CAPT Timothy Doorey
National Security Affairs, Naval Postgraduate School
Monterey, California